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HOW TO TEACH READING

A TREATISE

SHOWING THE RELATION OF READING TO
THE WORK OF EDUCATION

BY

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THE NORMAL COURSE IN READING.

COMPRISING: —

Primer: Preliminary Work in Reading ;

First Reader : Word Pictures and Language Lessons ;

Alternate First Reader : First Steps in Reading ;

Second Reader : Select Readings and Culture Lessons ;

Alternate Second Reader : Progressive Readings in Nature ;

Third Reader : Diversified Readings and Studies ;

Alternate Third Reader : How to Read with Open Eyes ;

Fourth Reader : The Wonderful Things around Us ;

Fifth Reader : Advanced Readings in Literature — Scientific,
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PREFACE

THE reading lesson should be made the most interesting exercise of the school. Why is this true? Interest may be secured by teaching correctly. Reading may be taught correctly better by use of a book that is well adapted to the purpose than by one that is not.

This manual has been prepared in the belief that the suggestions herein given will be valuable in securing correct and effective methods of teaching. The authors of the manual believe that the first requisite in teaching reading is to secure interest on the part of the child in the subject about which the matter of the reading lesson treats. This is fundamental. How such interest shall be created is for the teacher to determine.

All psychological philosophy and every pedagogical consideration relating to the subject point to the fact that the interest of the child will be easily and naturally secured if he is made to come in contact with, or, so to speak, have experience with, the subject treated of in the lesson,—that is, the child should, by self-control, learn much of a subject before he learns to read about it.

This manual urges the value of experience or of knowledge-getting on the part of the child, and the value of talking about such knowledge before an attempt is made to teach him the forms representing such knowledge. The child who has picked, examined, and talked about a flower, and has become interested in it, and has used in his conversation the words his eyes are to see in the lesson he is to read, will be interested in learning such words by sight, and will learn them easily. The effort he puts forth to read will make a rich and permanent impression on his mind. The forms—spelling—will be more easily learned and more

firmly fixed (remembered) than will be the case if he reads or attempts to learn these words without previous preparation. Will the teacher tell why this is true?

The authors of this manual believe that much of the teacher's time may be spent profitably in getting the child ready to read, and that this is desirable each and every time the young child reads. The purpose of teaching reading, after all, is to give the child ability or power to see thought, relativity of thought, and even delicacy or refinement of thought through and beyond words. To grow into the ability to do this the child should learn words from the standpoint of knowing (his own knowing). The difference between singing notes and singing music is no greater — although in one case there is music while in the other case there is no music — than is the difference between reading which is done from the standpoint of forms or words and that which is done from the standpoint of knowing.

This manual appears for the purpose of urging the importance of teaching reading properly from the beginning of the child's school life, that the desirable results above alluded to may be the fruitage of the child's education in learning to read. He should know and talk, then learn reading. The more the child knows and the more he talks about it, the more interesting will it be for him to read on that subject.

The more he knows before he begins to learn to read, the more certain it is that he will want to read, and the more he knows, the more certain it is after he has learned to read that he will read. "Read and you will know" is the very reverse of the true philosophy of teaching primary reading. Know first, read next, is the philosophy by which the child is made to feel that reading matter has something in store for him. Ability to read words will not insure the habit of reading for improvement. A knowledge of reading must come through knowing — precedent to the art of learning to read.

THE AUTHORS.

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HOW TO TEACH READING.



CORRECT LANGUAGE TEACHING,

THE PROPER PREPARATION FOR LEARNING TO READ.

THE ultimate purpose of learning to read is that training which will give its possessor the power to see the concrete as clearly in the written description as the trained eye would see the thing described; to feel the emotion expressed as his own; to understand the willing or the conclusions expressed, as if willing, doing, or making the conclusions himself; to recreate — make a distinct and intelligible consciousness out of the symbols read.

Learning to read may be considered under two general heads: *First*, learning the symbols in which the known is preserved; *second*, learning how to use these symbols so as to add to one's store of knowledge.

Or (to express the same in a different way): *First*, learning to recognize the forms of speech — words, signs, idioms, sentences, discourse, symbols representing what is definitely in the mind of the learner; *second*, learning to get information from these various forms of speech.

The more faithfully forms of speech represent correct ideas existing in the mind of the learner when he learns them, the better is he prepared for the second part of learning to read. Words or other signs, if learned as the symbols of imperfect or incorrect ideas, indefinite or false

relations, will ever after be misleading, or, when their true meanings have become known, will always need to be translated.

The child's first effort in learning to read must be to recognize his own words, representing his own knowing, his own thinking, his own feeling, his own willing, his own concluding, his own doing. It is of the highest importance that these words stand for both correct and exact ideas.

The vocabulary which the child brings to school does not, if a small percentage of words be excepted, represent exactness. A few names stand for the right things, whereas many or most of his words representing qualities, feelings, abstractions, are not the symbols in any degree of exactness of the ideas for which they really stand, as they exist in his own mind. It is unwise to teach him these as symbols of what they now represent to him. It is unwise to characterize the beginnings of his school education by such indefiniteness or obscurity.

As a preparation for learning to read, the child must have exact ideas, and must be made to express the same correctly. The wider the range of ideas, the more diversified the knowing and thinking consistent with sequence and unity; the more nearly they represent all the functions of the mind, however childlike their manifestations, the more rapidly and perfectly will the child appreciate the symbolic nature of words, seeing in them entities, living realities; the more rapidly will he learn to read, and the more delightful will this be to him. With how great enjoyment does he see his own thought in the graphic symbols of his own spoken words!

Not only, therefore, must the child think, and think correctly, but the teacher must know what and how he thinks, for under no other conditions can it be known by the teacher that he speaks correctly and with exactness.

How soon in the average school work does the child learning to read reach a point in his progress where the

reading matter is too difficult for him! The reason should be sought. The trouble is not that he cannot be made to pronounce the words, for this can be accomplished, so thorough may be the school drill and so inevitable the mechanical results of prescribed processes. The reason is not far to seek. The words and sentences represent ideas and thoughts that have never had a lodgment in his mind; more than this, he has never learned symbols of corresponding ideas and thoughts by which these may be interpreted. Persistent drilling on such words as these will do little toward teaching the child to read.

Much reading of matter similar to that previously read in his progress does not prepare the child to advance satisfactorily. This has been demonstrated times without number by the addition of supplementary reading matter.

The studying of definitions given in the book will do little good; definitions carefully given by an intelligent teacher will do little good. The child must be given experiences represented by the words he is to learn, or experiences similar to them. He must be trained in broader lines of seeing, feeling, planning and doing. He must be led into the field of imagination and be made to create thought. He must be exercised in fields of emotional activity: of love, hatred, generosity, caution, fear, etc., and then he must be helped to express all these sensations or feelings, and must learn their symbols as the representatives of what exists in his own mind. With this preparation he can advance in learning to read.

The child must be made to know more, step by step, in advance of his learning to read, and, at first, what he reads must represent what he knows. These preparations will be to him his true interpreters of what he afterwards reads on the same subjects. They will be the keys to the dictionary, making lists of synonymous words intelligible to him.

Knowing is the only safe compass and helmsman in the boundless and dangerous sea of emotional activity; the

only source whence proceeds determinative, profitable, creative activity; the only reliable enginery of willing, whether it be concluding or doing.

Subjects of thought must be presented to the child first through the senses. He must be made to know through original channels of information.

The best possible work in exact seeing is the study of forms offered in exercises that come under the head of drawing. The lessons given under this head are, first, the modeling of forms in clay in imitation of forms presented to the child. These lessons train his eye, his judgment and his hand — coworkers for the accomplishment of a definite purpose. Then he is carefully trained to talk about the forms he has made.

Other kinds of work under the head of drawing are stick-laying, paper-folding and combining geometric forms in wood or in paper, all of which, after being made, are represented with pencil, or in color, and in turn are described. Some of these are compared and the processes of doing given, which is narration. It is thus seen that much exact language training is possible under the head of drawing. Good work will begin simultaneously with the number lessons which take their start in the form lessons, in making simple problems and in solving them.

Much good work can be done for a short time by naming the objects in a room and stating their relative positions and some of their qualities, by the use of simple pictures for description and story; by making tableaux of children and their playthings for a like purpose. These, however, without too much labor on the part of the teacher, soon become exhausted.

No other subjects readily comprehensible, and at the same time interesting to the child, offer such opportunities for seeing, for training in the exact use of a broad vocabulary, available for general purposes and to a limited extent already possessed by the child, as does the study of natural history and elementary physics.

Comparison of forms, sizes, colors, number, uses, positions, affords wide scope for exact seeing of likenesses and differences, for intelligent conclusions, and for the exact expression of such seeing and such concluding.

The amount of training which it is possible to give young children in correct seeing and correct thinking, in the early drawing and number lessons, and by the use of natural objects, plants, animals and the human body, is very great. Material for such lessons, moreover, is easily obtained and prepared by the teacher.

By the means thus indicated for inciting the child to thought and for directing him in his thinking, it is easy to give the best training in the use of language, which training is the best possible, indeed the only proper, preparation for learning to read.

It will therefore be seen that, whereas the study of elementary science educates by training the child's perceptions, his comparing and reasoning faculties, as no other study can do at this stage of his education, and while it at the same time enriches his mind with knowledge, its introduction at this period is chiefly to furnish a means of accurate and determinative training in the English language. The work is not done that the child may learn and recite facts, but that he may see facts, and thus be led to use language for exact and correct expression.

This work, if properly done, is far-reaching in its educative effects, whether mind development or language training be its purpose; for objects are not studied in a heterogeneous way, but are presented in groups whose parts are related. For instance, if a leaf is studied, several kinds of leaves must be studied in connection therewith. These, by a perception of their differences, must be separated into groups, after which many leaves may be found by the child, each of which he, deciding for himself, must place in the proper group. If an animal (as the squirrel) is studied, two or more animals belonging to the gnawing group of animals

must be studied also, that relations may be seen, comparisons made, and conclusions drawn therefrom.

There is, moreover, idiom of the English language which belongs to description; this the child gets by the help of the teacher when he describes the thing examined. There is English idiom used only in comparing; this the child learns and uses when comparing or contrasting the objects considered. There is English idiom belonging to narration; this the child is helped to get by the teacher, and this he uses when telling the story of the growth, or of the life, the incidents of capture, of finding, or of buying what he has examined, described and compared. Thus his vocabulary is enriched by idiom that will never be there as a possession except by some such means. Now when the child sees the words for the first time, they are not meaningless to him; he greets them as friends, though friends whom he has never before seen. The reading of good English with such preparation is not only easy to the child, but soon becomes a delight to him.

In addition to the kinds of work above named, vapor, with its phenomena of steam, cloud, mist, fog, rain, hail, snow, is taught by experiment and objects as a beginning of the study of geography, as well as for the special purpose of language training and of proper preparation for reading. In this subject is presented a kind of learning quite different from anything the child has had before, namely, discovering by experiment. Water under the influence of heat turns to steam, leaves the receiver and, for a moment, is lost to sight, when, by the influence of cold, it returns to view as mist, and soon looks into his face from the side of an ice pitcher.

In the various parts of this interesting and most practicable work, excellent opportunity is found for training the productive imagination in the exercise of the creative functions of the mind, the foundation for which is securely laid in the many facts learned. As the child presents the sup-

posed history or biography of a drop of water on the pane of glass, or other like subject, the teacher can judge of the intelligence with which it is done, for he can estimate by known laws, and thus know whether the imagination of the talker or writer is clear, healthy, and under control, or is clouded, unintelligent, undirected, or visionary.

Such work broadens the vocabulary, gives subjects for conversation and composition, and prepares the child to read good literature, under whose influence he is morally safe, by whose teachings he is made wiser, happier, and better. This cannot be said of much of the reading that many children select without such training, nor do we believe it is true of much of the reading matter — though presented as choice and classical — called “fairy tales.”

While the distinctive purpose of teaching reading in the first three grades of the school is to make the pupils know the symbols representing their own knowledge and mental processes, much practice is given in reading the same and kindred facts and processes as expressed by accepted authorities. This is done to broaden the vocabularies of the children and to teach the kindred significance of words. Much reading is done also to get information similar to that in the possession of the children, to be interpreted by it and assimilated with it.

Learning to read should do much toward training the attention and the judgment. This should result in conscious power. As, in the preparation for learning to read, the pupil learns to know and to feel his ability to investigate and to decide through original channels of information, so now he must gain a corresponding confidence in his ability to investigate, to see and to know through symbolic channels.

In the fourth grade the reading begins to be more distinctively for the purpose of getting information, and this feature is more and more characterized through the remaining grades. Great care is required in the transition. For

this purpose, the text is illustrated by objective work or experiment, or is supplemented by tests for truth and for application, the effort being, as stated in another place, to train the learner to see accurately and to know exactly by reading.

No greater care is required in any reading lessons than in those belonging to this transition period.

The historical story begun in the fourth grade can be understood only by examination of many objects representing the lives and customs of the people and times studied, and by intelligent comparison of the same with corresponding objects representing the lives and customs of the people of to-day. Objective work is all-important in this grade of school, but its use is for another purpose than that for which it is given in the lower grades.

The greater the variety of categories the broader will be the foundation for learning from symbols, and the greater the variety of experience within a given category the more deeply will the child understand the experiences, reflections, and conclusions of others as represented by symbols relating to that category. As the subject grows, the field of literature widens, both the part that is used as an inspiration and the part that is used for more knowledge getting, better understanding, and further application. This kind of work leads directly into the whole field of literature, for it starts from two points of interest with experience getting, whether of nature or the social world, affecting the child. The child is experiencing his way out and up; out of embryonic condition into individualism or identity; up from passivity, the creature of environment, to self-directed activity in which he uses environment for self-growth and pleasure.

There is no uncertain fiction, no fable, no danger; there is truth and only truth, and that in its best array.

NATURE STUDY.

ITS AIMS AND PURPOSE IN TEACHING READING.

“ Nature, the old nurse, took
The child upon her knee,
Saying, ‘ Here is a story book
Thy Father hath written for thee.

“ ‘ Come wander with me,’ she said,
‘ Into regions yet untrod,
And read what is still unread
In the manuscripts of God.’ ”

THESE “manuscripts” are full of beautiful pictures. On their pages are inscribed stories more wonderful to children than fairy lore. If trained to use their eyes and ears, they may wander happily in this fairyland of science; for

“ Whether we look or whether we listen,
We hear life murmur or see it glisten.”

Says Miss Buckley, “No person is so independent as he who can find interest in a bare rock, a drop of water, the foam of the sea, the spider on the wall, the flower underfoot, or the stars overhead.” And these interests are open to every one who enters the fairyland of nature. He who goes through the world with his eyes open is constantly learning, and is ever in possession of means of enjoyment.

An important purpose in the study of nature is to call into activity those powers upon the exercise of which the growth of intelligence depends. Every study should be

valued in proportion as it develops power; power is developed by self-activity. Self-activity is the fundamental law of human growth. Through self-activity the child attains to self-reliance, without which there can be no true character formation. He who induces self-activity systematized to a purpose, educates in a true sense.

The kind of knowledge gained in school work is determined by the subjects presented, but it must be remembered also, that the kind of activity excited depends on the method of presentation as well as on the subjects presented.

Real training, as it is related to the observing powers, means the leading of the learner to so use each of his senses that the highest development will result. The trained mind sees, hears, tastes, smells, feels and acts for definite purposes.

A knowledge of the elements of form, size, color, weight, extension, tastes, odors, sounds, etc., must come by a study of things. Verbal descriptions, however concise and clear they may be, cannot give to the young learner a knowledge of the external world. True ideas result from sense impressions, experiences. What is better adapted to this end than nature study — the study of the child's physical environment?

Thought is evolved by the continued attention of the mind to a particular subject. This thought the child must be trained to express clearly and truthfully. What ideas can be expressed so clearly, so concisely and truthfully as those which are clear and exact because gained through self-activity?

The child handles the objects, and learns through the fingers, the muscles, the sight, in correlation with the brain. He sees, does, finds out, thinks, and so knows. He so blends his seeing, feeling, doing, thinking, with representing, that the result is knowing with the ability to express intelligently what he knows. Thus directed he acquires the habit of careful, accurate and comprehensive observa-

tion, and of clear, concise thought and expression, with the ability to read understandingly ; for he has established and symbolized interpreting concepts.

Merely seeing a thing is not getting knowledge of it. It must be thought about, adjusted to other things, compared with something else, — the likenesses and differences noted, — the essentials and the non-essentials distinguished ; and then it must be represented in symbols. One can compare readily, carefully, and accurately if he have the objects for constant reference. If in this work of comparison the pupil is carefully guided in drawing conclusions from facts discovered, and then in verifying these conclusions by further observation and experiment, the power of judging correctly will be developed and strengthened ; then, if he is trained to express in correct words, to symbolize, words will have the right meaning to him.

The creative or constructive faculty is especially active in childhood. But the imagination merely unites and rearranges the material with which the senses have furnished it ; it can do no more than build upon one of these.

In nature study, excellent opportunities are found for training, exercising, and controlling the child's imagination in the games which he may be taught to play, and in the stories which he may be led to make, the foundation of which is securely laid in the many facts discovered.

“What is more charming or helpful for such work than the story of the mother tree who, after putting her baby buds to sleep — covered with a soft white blanket, a green quilt, and a waterproof coverlet — herself goes to sleep, preparatory to the labor which she must perform in weaving beautiful garments for these same babies when awakened in the springtime ? ”

What is more interesting than the story of the baby plant lying asleep in its seed cradle until awakened by the rain and the sunshine ? What is more pleasing than the work of “Jack Frost” ?

“Some one has been at the windows,
Marking on every pane;
Who made those glittering pictures
Of lacework, fir trees, and grain?”

“The little brook heard it and built a roof,
’Neath which it housed him winter proof;
All night by the white stars’ frosty gleams
He groined his arches and matched his beams.”

Poetry is filled with such imaginative touches, but how is the child to create the appropriate pictures unless he has a store of memories for interpreting the symbols — words?

True poetry is so beautiful that it seems not unreasonable to believe that it must have been written in the presence of inspiring actualities.

By giving personality to animate and inanimate objects, the bare facts of science may be woven into fanciful webs, thereby developing healthy and safe imagination. The field for such training is inexhaustible.

If rightly taught, he who studies nature will gain the power to see and to enjoy beauty; will have a deep abiding love for nature; will hold “communion with her visible forms”; will interpret her “various language.”

Love for investigating nature creates love for the beautiful; love of order; admiration for wise laws and perfect organism. If this love be nourished, it becomes a strong element in the formation of character. Clear seeing, earnest thinking, and reverent feeling should come from the true study of nature.

A thorough scientific course is not possible nor necessary in the elementary schools, but the study may be wholly scientific so far as it goes. One should not seek to exhaust a subject. Groups or units of related subjects should be given, to enable the children to make comparisons, to draw conclusions, to group, and to classify. The marvelous adaptation of structure to habits and uses should be discovered by the children.

The plant should be studied in its relation to climate, air, water, soil and heat; the animal in relation to its environment, nourishment and support.

The learner must be trained to see the changes through which the rock has passed or is passing; the forces which affect the earth and its inhabitants, and the series of transformations of a drop of water.

What a field for delightful work in reading is botany; the study of plant life, that which the child sees unfolding and developing everywhere about him, abundant and beautiful, necessary to his own existence!

In the study of the plant, its root, stem and leaves — he learns with delight that each part has a work to do; that each plant comes from a seed; and he becomes interested in planting seeds; he watches with increased pleasure the germination of the seed as it unfolds into root, stem and leaves, for he finds

“As wonderful things are hidden away
In the heart of a little brown seed,
As ever were found in the fairy nut
Of which children sometimes read.”

The unfolding buds are studied and watched with pleasure as they develop into leafy branches or beautiful flowers.

“The careless eye can find no grace,
No beauty in the scaly folds,
Nor see within the dark embrace
The loveliness it holds.”

The dainty flowers growing by the wayside tell their story of beauty and love, and are fragrant with the secrets of their growth and usefulness. If rightly studied, they lead to an understanding of what Tennyson meant when he wrote,

“Flower in the crannied wall,
I pluck you out of the crannies,

Hold you here, root and all, in my hand,
Little flower ; — but if I could understand
What you are, root and all, and all in all,
I should know what God and man is."

The study of leaves has a charm for the child if it is made in the season of leaves. Just as true is it also of roots, stems, flowers and fruits.

By simple steps, each of which is taken many times, the child advances in the study, year by year, until he acquires a knowledge of plant life. His mind during these processes is strengthened, his breadth of seeing and thinking is enlarged, for the study has involved his knowledge of the phenomena of cold and warm weather, of wet and dry weather, of sunshine and cloud, of springtime and summer, of fall and winter ; and his experiences, because of other relations of life than those of his school, have been made to form a part of his knowledge as one compact interrelated entirety, and to do office in that training which gives him power to see and strength to discover, cause and effect.

A most fruitful and interesting source for such training is the observation and investigation of animal life. The structure, mode of living, the wonderful, natural instinct, and the peculiar adaption of structure to habits in animals are especially interesting to the child. He enjoys studying and reading about the habits and the homes of his friends in feathers and fur.

Where is there a child who does not love birds ? He listens to their song, is pleased with their plumage, watches them building their nests and rearing their young. He likes to talk about them, and, if intelligently guided, he may be trained to glean for himself many interesting facts. He may

" Learn of every bird its language,
Learn their names and all their secrets,
How they build their nests in summer,
Where they hide themselves in winter,
Talk with them where'er he meets them."

Out of the study of animals and plants should grow an increased power in accurate, related seeing; a knowledge of the objects studied, and the power to express clearly and concisely the knowledge gained.

The work here indicated is possible in the schoolroom; fortunately, also, it is the most profitable work that can be done for the accomplishment of those mechanical results which the school is expected to secure.

In a corresponding way the study of minerals is equally profitable.

The work thus far has for its purpose, first, that training which leads to the perception of facts without reference to their cause — facts of size, color and form, of which the vegetable, animal, and mineral world furnish so great and so delightful a variety, — and, second, the perception of these facts and also of their use or purpose, which involves an effort to discover cause and to see effect.

The materials for use in training the child in these two steps are easily obtained. Their investigation affords him a most delightful occupation, which correlates mental and physical activity in the acquisition of knowledge, thus insuring improvement in both.

Along a corresponding line, and of great interest to children, is observation of other natural phenomena. The child takes pleasure in observing the rain, the snow, the feathery frost, the dark, gray clouds, the light, fleecy ones, the glow of the sunset, the rainbow hues so charmingly blended; and he likes to tell of his observation.

As he advances in his work, he studies vapor with its phenomena of steam, cloud, fog, mist, rain, sleet, hail and snow. Water under the influence of heat turns to steam which, leaving the kettle and coming in contact with cold, turns to water mist and then quietly floats away. This the child observes, and feels that perhaps the cloud is lost, until by further observation he discovers the mist slowly forming on the window pane or other cold surface. By

repeated efforts, by slow stages, he learns the causes of clouds and their precipitation as rain. He sees the morning mist, rising from the sidewalk or other wet surface as water dust, being carried away to be formed into drops and returned again to the hilltop as water; by slow degrees and easy steps he learns that the sun is lifting the water from the sea and from every other place where water is found, in whatever form, to the skies, where it is gathered and drifted and cooled, to be returned to the earth.

By easy steps he is led to see the influence of water in its varied forms upon the earth's soil and rocks, leading therefrom to the causes of the formation of valleys, of brooks, streams and rivers.

In doing the work suggested, the child is assigned very few if any tasks. He is led to put forth purposive effort by an interest that the teacher arouses in him in the subjects under consideration. The principles of the Kindergarten are continued in the primary school, making the acquirement of knowledge pleasurable.

While doing this work, he is learning to read by reading many stories and descriptions and poems, relating to and based upon the work which he does, and which enables him to understand thoroughly what he reads. He is interested in what he reads, because it is the confirmation and expansion of what he knows to be true, as found by his own efforts. Very few, if any, tasks are assigned, yet the child is becoming an original investigator; he is learning to use English for the expression of exact ideas in their exact relation.

If the purpose of the work be only to teach the child to read, no more profitable plan nor one more certain of true success could be adopted. If the purpose be merely to teach him to talk correctly, to use his mother tongue for a purpose, accurately and at the same time exactly, no better scheme could be devised. If the purpose be to train the child to see, to discover, to project, to observe, to image, and

to draw conclusions within the limits of the possibilities of his mind, no better process could be employed.

“He alone can use language with freedom, certainty, and accuracy who is conscious of needing for the expression of his thoughts all the words and phrases which he employs.” In the study of nature the child has something to say, he desires to say it, he appreciates the necessity of words to express his thought, which words, under such conditions, when written on the board, make deeper impressions than the same class of words woven into sentences not his own.

In nature study, the interest of the child may be secured and may be increased as advancement is made in the work, for hidden beauties in nature will clearly appear. The nature lessons which the child finds in his readers are interesting to him because he is able to form true mental pictures of what he reads.

Much collateral matter should be read. This is done to broaden the children's vocabularies, and to teach the kindred significance of words. Supplementary reading, to be of real value to children, should have for its object the giving to them a better knowledge of the subject which they are studying; thus will concentration be secured.

The children should be encouraged to find matter in their home reading pertaining to the subject, and bring it to the recitation. Apposite poetry should be read. Through such study and reading they begin to see what the poet sees and to understand what he thinks. They will reap the benefit of the poet's clear vision, and will learn not only to observe but to interpret nature. By this means, pupils may be led to appreciate and to enjoy poetry worthy of a place in the library of a scholar. They learn how to use books, and form a habit of using them for a purpose.

Along this line of reading, enjoyable and of literary value, are the pretty nature myths, the pleasing fairy tales, that class of highly imaginative literature in which the moral is most ingeniously interwoven, but which can

scarcely be appreciated, even by older pupils, so that real benefit is deduced therefrom unless there has been intelligent observation and study of nature.

The child should be led into the field of imaginative literature; but how much more satisfactory, how much safer it will be, if his knowledge be based on his own observation and investigation!

Nature study, as it should be presented in our primary schools, is incomplete without the aid of literature; while any study of literature, however elementary, shows one that knowledge of nature, full and sympathetic, is indispensable to intelligent reading.

This truth is easily recognized in reading poems of nature. The works of our best poets — Whittier, Longfellow, Holmes, Bryant, Wordsworth, Lowell, Tennyson and many others — cannot be read with the love and appreciation they so richly deserve unless the study of nature has furnished a large part of the early training. Many of the productions of these authors may be beautifully adapted to child reading. Those lessons, so poetically figurative, yet so true to nature, found

“ In the birds’ nests of the forest,
In the lodges of the beaver,
In the green and silent valley
By the pleasant watercourses,”

may be intelligently interpreted, and become a source of pleasure to pupils in proportion as their observation and instinctive love of nature have been correctly cultivated.

This work, however, requires ideal teaching. It is not accomplished by the assignment of lessons on the part of the teacher; nor by conning on the part of the child. It is reached by self-imposed purposive activity on the part of the child; it is induced by a loving appreciation of the way the child learns, and by a broad, intellectual, thoroughly planned leading, on the part of the teacher.

TALKING LESSONS

PREPARATORY TO THE TEACHING OF READING.

THE average child of six years who enters the primary grade without having had the advantages of true Kindergarten training is not prepared to learn to read.

Much valuable time is lost by attempting to teach the child to recognize words and forms of words before he is ready for such teaching. The distaste which many a child has formed for reading is due to the great effort he has made to do the work imposed upon him prematurely.

The teacher who feels that her most important duty is to teach her pupils to recognize one or more words by sight the first day of school has not mastered the simplest elements of the psychology of reading.

The first work of the teacher should be to get acquainted with each child. She should find out what each one knows in various directions; what his environments are; what he is most interested in; his power to give attention and to follow directions:—in short, she should know his capabilities.

Then she should take the children as she finds them. Every subject which she teaches should be used as the means for cultivating good taste and good habits,—habits of attention, of helpfulness, of industry, of truthfulness, of politeness, of genuineness in thought and expression.

When the child enters school, his interests are centered in his friends, his home, his pets, his playthings, games, simple processes, food and clothing. Animals, plants, leaves, flowers, fruit, stones, pictures, colors and toys fas-

ciate or charm him. This interest furnishes the key for the selection of material for future work.

How is he to be prepared for the work in reading ?

First, by a systematically planned course of conversational lessons, in which he does most of the talking, on subjects about which he is eager to ask questions and to express his own opinions.

Second, by a systematically planned course of lessons in manual effort, — in modeling, drawing, painting, stick-laying, paper-cutting, in making objects and in molding in sand.

The subjects about which he should learn and be led to talk are those concerning which he will in the next step be called upon to read.

The teacher should carefully examine the matter given in the Charts, Primer and First Readers of "The Normal Course in Reading." She should study the purpose of the work given therein. She should carefully note the vocabulary — words and composition idiom. She should plan to secure specimens sufficient in number for individual study.

In the observation and experiment work the teacher should train the child to see, and to tell in good language what he sees, until his vocabulary is enriched by a score of composition idioms, and until he has some power to use his vocabulary for exact expression. The time and effort will be repaid by the rapidity and ease with which he will learn to recognize at sight the words which he uses.

While the children are having talking lessons preparatory to reading, many sentences are repeated again and again by the teacher in directing pupils in their work. Let the teacher, after giving a direction or a command, write the sentence on the board, and let it remain there. Then, when this command is to be repeated, let the teacher point to it, asking what the sentence tells them to do. Then another command may be written instead of spoken. By this plan children will easily recognize during the first month a dozen

or more sentences, learning to know them by sight just as they learn to know them by sound.

PLANS OF SOME OF THE LESSONS THAT SHOULD BE GIVEN PREPARATORY TO READING.

Training the Sense of Touch.

Have a child close his eyes. Give him an object to handle. Take it away and put it out of sight.

Have him open his eyes and find an object just like the one he handled. Let the other children decide whether he is right or wrong.

Have a child close his eyes. Give him an object. Take it away. Give him one like the first except in size. Have him state wherein the two are alike ; in what they are unlike.

Cover the eyes. Give a child an object. Take it away. Give him one like it except in hardness. Have him state in what they are alike ; in what they differ.

Use objects differing in length ; in width ; in roughness ; in material, etc.

Follow with exercises using objects alike in shape but differing in size and material, etc. ; as, a wooden ball and a smaller ball made of rubber or of yarn.

Give tests in distinguishing slight differences in weight and temperature.

Training the Sense of Hearing.

Place on a table in front of the class objects made of wood, glass, iron, brass, silver, china, etc. Have pupils observe them and tell of what each is made.

Strike the objects, having pupils listen and state each time what was struck.

Have pupils cover their eyes. Strike one of the objects. Pupils decide which one was struck. Give several similar tests.

Have pupils look and listen as each is struck with a different material from that used first.

Have pupils cover the eyes, then, as an object is struck, state what was struck, and with what (steel, wood, etc.).

Have pupils cover the eyes. Strike three objects.

Have pupils tell what was done, naming the order in which the objects were struck.

Have a pupil strike the objects, other pupils stating what was struck. Real sense training and improved expression should be the result of this work.

For work in slow pronunciation see page 58.

Quoting from Dr. Barr in *Child Study*:—

“Teachers should keep in view the fact that, in every class of fifty children, there are probably a dozen or more of them who have some defect of hearing, and who are therefore placed at a disadvantage as compared with their normally hearing fellows.

“In the case of children whose progress is unsatisfactory, and who are inattentive, dull, and idle, their capacity for hearing should be determined by proper tests, and if defective hearing is found, information of the fact should be sent to the parents, and their position in the class should be so arranged as to minimize the bad effect of defective hearing.”

Testing Children's Knowledge of Color.

Purpose: To discover the children's knowledge of color so that no time may be lost in trying to teach that which they know.

Material: Color tablets; colored paper; colored sticks; worsteds in short lengths; pieces of cloth; boxes of water colors.

Place on each child's desk tablets of each of the six primary colors. Pin on the wall where all can see it a square of red paper.

Ask pupils to find a tablet like it. If a child is wrong let him place his selection on the square on the wall. Let him decide whether he is right or not. If he thinks he is right do not correct him at present, the teacher's purpose in this work being to know what the child sees.

Repeat this work of investigation with the other five colors respectively.

Keep a record of results, noting those who fail to match the six colors.

Ask each to take a red tablet.

Note those who fail to apply the name to the color. Do corresponding work with other colors.

Show a square or an oblong of colored paper, and ask pupils to tell its color. Note those who do not know the name of the color.

Have pupils match colors.

These tests will show the teacher what training her pupils need.

Give each child a box of color tablets.

Have pupils separate tablets into groups, placing but one color in a group. Have them put into the box the six oblong tablets that do not belong to the six colors mentioned.

Have pupils note the three colors given at top of page on Reading Chart VI.

Find tablets to match these colors.

By mixing water-color paints, lead children to discover the production of green, orange and violet.

Have pupils state how each is made.

Have them match the secondary colors on the chart.

Give much practice in matching colors found in different objects.

Continue the work, using the remaining six colors in the color box.

THE SOLAR SPECTRUM. — Hang a triangular glass prism in a window where it will catch the sunlight.

Place a triangular prism on a mirror in the sunlight. From day to day have pupils note and try to match the colors.

Let pupils blow soap bubbles and note the colors.

Note the iridescence of pearl shells and certain kinds of glass, the neck of the peacock and that of the dove.

With the color tablets have pupils make the conventional spectrum illustrated on Charts. Do not let the pupil see the conventional spectrum from which to copy.

Each child should discover for himself the arrangement — the color relations.

Children should be led to talk freely of their observations in these color lessons.

Lead them to talk of the rainbow.

Tell them myths relating to the rainbow, "The Story of Iris," "The Indian Story," Longfellow's *Hiawatha*.

Training the Child to follow Directions.

Give each child a square of paper.

Have the children note the edges and corners.

Have them place squares on desks, each with an edge parallel with the edge of the desk.

Touch the right edge ; the left edge ; the back edge ; the front edge.
(Work for rapidity and promptness.)

Touch an edge; the children state which edge was touched, as: "That is the right edge," etc.

Observe corners. The pupils state that each square has two left corners and two right corners. Lead them to see and to state that two of the corners are nearer to them than the other two. *Nearer* and *farther* are given by the children.

Touch the nearer right corner, the farther left corner, etc.

Fold the paper so that the front edge shall lie on or be even with the back edge. Crease the paper. Open it.

Fold so that the left edge shall lie on the right edge. (Do not allow pupils to change position of paper.) Crease the paper. Open it.

Where do the creases cross? What is made by the creases?

Have pupils make same form with sticks. Have pupils represent the paper on blackboard.

Have them tell in correct language what they have done in each case. This work should be genuine training.

Direction and Position.

Have each child place his right hand on the front edge of his desk; on the nearer right corner; on the farther left corner; on the right edge; on the center of the desk, etc.

Place a table in front of pupils.

The teacher puts objects on the table, pupils stating each time what is done.

The teacher directs and the pupils place objects, as: Put a ball in the nearer left corner. Child states what he has done.

Much talking should be done in telling where objects are.

Have the children give positions of objects in the room.

After much practice in doing the work suggested, objects may be placed so that many sentences similar to the following may be obtained from the pupils.

John has the ball which was on the mat.

Mary has the one which was in the chair.

I am pointing to a doll near which is a cushion.

Alice has the cart which was on Nellie's desk. She gave the box which was in it to Nellie.

A box is on the center of the table. Near the box is a book on which is a little red ball.

On the table is a little chair under which is a large top.
I see the picture of a cat near which is the picture of a doll.

H. C. Bowen says: "Doing, or rather *expressive* doing, reveals to the teacher the nature of his pupils' knowledge; exhibits to the pupil new connections, and suggests others still; develops skill or effectiveness in doing, as mere exercise of information seldom does, or does but feebly; and trains the muscles, the nerves, and the organs of sense to be willing, obedient, effective servants of the mind."

PICTURES, THEIR USE AND PURPOSE IN TRAINING A CHILD TO SEE AND TO TALK.

In describing pictures, and in relating stories suggested by pictures, most valuable training may be given if the work is done properly.

The child untrained in seeing is as likely to be attracted by the minor points represented as by those more important. He is unable to separate the essential from the subordinate. He does not see the purpose of the artist in making the picture. He does not know that some objects are represented merely for the purpose of making one comprehend more fully the principal features or for enriching it. This he must be trained to see.

A child who sees a picture or an object properly has all the essential parts that make the picture or object in their proper relation. If he does not see aright, he is not prepared to attempt a representation in words to the listener.

Appropriate pictures should be selected for this work, pictures representing experiences of childhood. Those given on the Charts will be found very helpful for this purpose.

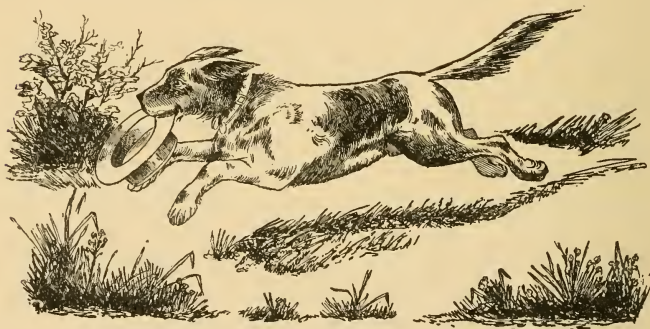
The first work should be in training the children to see and to tell what the picture represents, that is, the entire unit should be considered.

The children should be led to state the subject of the picture by a variety of expressions.

After the purpose of the picture, the subject, is stated, the teacher should lead the children so to represent it in words that the hearer, though not looking at it, may see it also. The children should feel that this is the purpose of their efforts. They can not do the work unaided.

At first a very simple picture, representing but one thought, not very complex, should be selected. The children should be led to tell what they see, using all the elements of the thought, each in its correct relation and forming a part of the whole, in correct language.

The following plans are suggestive of what may be done.



“Look at the picture and tell what you see.”

“I see a large dog.”

“What has the dog in his mouth?”

“He has a hat in his mouth.”

“What is the dog doing?”

“The dog is running.”

After obtaining these simple sentences, ask one of the class to tell again what he sees. When he says, “I see a dog,” give him the word “with” and ask him to proceed. He will say, “with a hat in his mouth.” Then have the

child give the entire sentence, after which he will give the description as follows:—

“I see a dog with a hat in his mouth. He is running.”

Question to obtain the following:—



“Here is Ned in a sailboat. The boat is sailing on a pond. Ned sits in the boat. He has an oar in one hand. He guides the boat with the rudder.”

Then lead the pupils to unite the sentences by giving them at the right time the idiom needed for such union, as:—

“Here is Ned in a sailboat, which is sailing on a pond. Ned, who is sitting with an oar in one hand, guides the boat with the rudder.”

“I think Ned is having a good time.”

THE NEW BOOK.

“Here we see Grace looking at a picture book.”

“Grace sits in a small rocking-chair.” “She holds a large open book in her hands.”

“In front of Grace is a doll carriage.” “A doll lies in the carriage.”

After obtaining the above, have pupils unite the second and third sentences, as: —

“Grace sits in a small rocking-chair, holding a large open book in her hands.”

Unite the fourth and fifth sentences: —

“In front of Grace is a doll carriage in which a doll is lying.”



PLAYING PEDDLER.

“On one of the charts is the picture of a little boy playing peddler.”

“He carries his goods on a small board which rests on his left arm.”

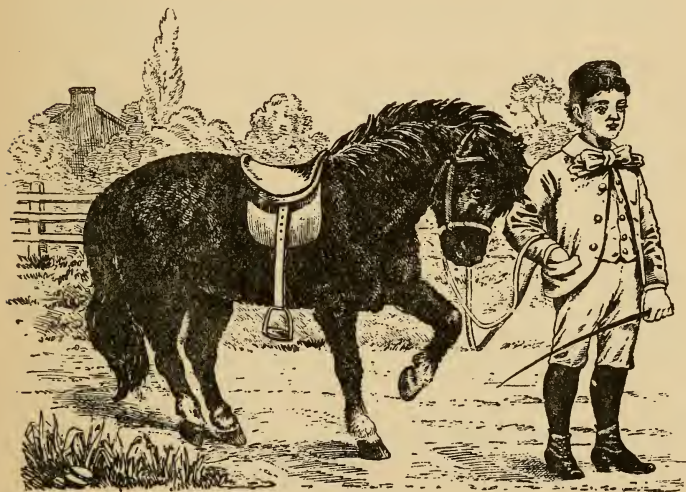
“On the board are a toy house, a pretty ball, a large doll and a jack-in-a-box.”

“The boy is trying to sell his toys to a little girl who is sitting in a chair holding a doll on her right arm.” “She has a large open book in her lap.” “I think they are having a good time.”

FRANK AND HIS PONY.

“Here is Frank with his black Shetland pony, which is saddled and bridled.”

“They stand in the road in front of a house around which are many trees and a fence.”



“In his left hand Frank holds a riding-whip, while the right one is thrust into his jacket pocket.” “On his arm rest the bridle reins.”

“The pony seems impatient for his master to mount, for he is pawing the road with his left forefoot.”

It is as easy to lead the child to say, “I see a dog with a hat in his mouth,” as it is to lead him to say, “I see a dog, and he has a hat in his mouth.”

The English has little idiom that is difficult. This is a boon to the child too little appreciated. The forms of the relative pronoun, a few prepositions and a conjunction or two properly added to the child's powers of expression, will aid much and perceptibly, both in training him to talk better and in helping him to see relations of subordina-

tion, a valuable acquisition of power. Not to give him power and habit in the use of these helps in correct and full expression is to make him weak in seeing the relations they symbolize.

REPRODUCTION OF STORIES.

The first work should be quite simple. Tell (do not read) a short, interesting story. Have each pupil tell one thing that he remembers.

Continue this work of telling pupils a short story each day, requiring them to tell one or two facts which they remember.

Little by little the child gains strength, so that in time he is able to reproduce the whole story in good form.

Let the story selected for each day be one that helps or is connected with some other line of work. Fables, stories, myths and fairy tales based on nature study are well adapted to this work.

Whenever possible, have the children illustrate these stories by cutting paper, molding in sand or drawing with chalk on the blackboard.

Herbert Spencer says, "Almost invariably children show a strong tendency to cut things in paper, to make, to build, — a propensity which, if duly encouraged and directed, will not only prepare the way for scientific conceptions, but will develop those powers of manipulation in which most people are very deficient."

THE STUDY OF NATURE.

Elementary lessons in plants, animals, chemistry, physics, physical geography, and other branches of common knowledge become a necessity to the teacher who understands why the children are in school, what a teacher's duty is toward his pupils, and how such duty can be discharged

not only most profitably, but also most easily, most economically, as well as most intelligently.

The study of plants and animals in the lower grades of school is made delightful and profitable when it is prescribed as a means of training the learner to see, as a means of getting related information for the learning and exercise of exact expression, and the correct use of language, and for making verbal material that has meaning to the child for his first reading lessons.

The teacher must remember that a knowledge of botany and zoölogy is not the primary purpose in giving plant lessons and animal lessons in the lower grades of school; that a knowledge of the science of physics or of physiology is not contemplated by giving elementary lessons in these branches of learning.

This work can be made most interesting if the child is led to see the poetic, artistic and sympathetic side of nature.

The following are suggestive plans and outlines for some of the work in the study of nature:—

PLANTS.—Begin with the whole plant. Have pupils tell: Where the plant grew; what was necessary to make it grow; from what it came; who brought it to school.

Lead pupils to observe the three parts,—root, stem and leaves.

Have them state where the root is found; the nature of the stem.

Lead them to unite and arrange their sentences as follows:—

“I have a plant which grew in Ned’s garden.” “It grew from a seed.” “The rain and the sun helped it to grow.”

“This little plant has roots, a stem, and leaves.”

“There are many little roots which look like threads.” “They grow in the ground.” “The woody stem has pretty green leaves.”

“I am glad Ned brought this plant to school.”

After the work suggested in the foregoing the pupils may be led to see and to state the work of each part. Have pupils memorize a stanza or a gem related to the plant.

The study of leaves, if properly taught, is most interesting as well as profitable work.

For the first lesson do not specify the kind of leaves to be brought, but simply ask pupils to bring leaves.

Purpose: To find out what leaves the pupils know and to discover what they see in leaves.

Material: Leaves brought by the teacher and children.

Have pupils sort and group the leaves, placing but one kind in a group.

Have them show and name the kinds they know.

Have them tell the color of the leaves.

Have them tell how they distinguish one leaf from another.

Give each a leaf to draw or paint.

The children in this work should be led to talk freely so that the teacher may discover their knowledge of leaves and the language they use to express what they know.

This lesson will show the children that they do not know the names of many of the most common leaves about their homes, thus awakening a desire to know them.

For the next lesson tell the children the kind of leaves to bring.

Describe each of the selected leaves, noting size, color, shape and texture (what the child sees).

Study the parts of the leaf, — the blade and the footstalk.

Study the apex, margin and base of each.

Note the venation of leaves studied, and distinguish between the framework and the filling.

Discover what the veins contain and whence the fluid comes.

SEEDS.— Name and recognize from six to a dozen seeds, as : beans, rice, corn, wheat, oats and the common flower seeds.

Plant many seeds of one kind (beans), to furnish specimens for class work.

Plant a few seeds of each of several varieties, to establish the fact that each seed contains a living germ.

Show by experiment that moisture, light and heat are necessary conditions for the healthy development of a plant.

Plant seed in cotton that the different stages of germination may be observed.

Study the parts of the seed, — seed coat, seed, leaves and germ.

Compare the parts of the seed with the corresponding part of the growing plant to establish facts of origin.

Encourage children to plant seeds at home, and to note time needed for appearance of plants and their final development.

Develop and write many descriptions on seeds to be read by the children.

Read or tell stories on seeds from standard authors to be reproduced by the children.

BUDS. — Study the tree first.

Note when and where on the plant buds first appear.

Distinguish between side (axillary) buds and end (terminal) buds.

Observe the scar below each axillary bud and discover what it indicates.

Note the various outer coats of the buds studied, and give their uses.

Note the gummy, sticky covering of some buds, and give its use.

Note when buds swell and open.

When the scales separate, note their arrangement.

Note the different ways in which the leaves are folded within the buds.

Distinguish between leaf buds and flower buds.

Describe many buds.

Observe many likenesses and differences between buds studied.

Draw and paint the buds.

Tell or read stories about buds. Have pupils reproduce the stories.

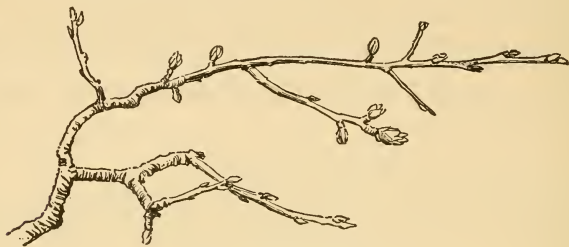
Find stories from standard authors for pupils to read and reproduce.

The proper way for children to study buds is to watch them unfold. Buds will develop indoors if the branches are kept in water and if the water be changed frequently. The development will be hastened by frequently trimming the lower ends of the branches with a sharp knife.

Purpose: To lead the children to observe the formation and growth of buds previous to cold weather, as well as the protection provided by nature.

Plan: Give each child an apple twig to observe. Lead children to think the twig is talking, telling them about her baby buds. Have children tell just what they see. Then question to obtain sentences similar to the following.

The teacher must remember that the *pupils are to talk.*



THE APPLE BRANCH.

"I am a branch of the old apple tree."

"I have many baby buds." "There are many baby buds on the tree, too." "Each has a little cradle in which it sleeps." "The cradle is made of brown scales." "The scales keep the bud dry."

"Each baby bud is covered with a soft white blanket and a green quilt." "Next winter they will not feel the cold." "The soft blanket and green quilt will keep them warm."

"Soon baby buds will be fast asleep." "Mother tree will go to sleep, too." "Baby buds and mother tree will sleep all winter."

At the close of the lesson have pupils memorize the stanza, "Rock-a-by-baby," etc.

Have pupils mold, paint and draw the apple twig.

The teacher should sketch in the presence of the class an apple tree as it appears after the leaves have fallen.

In early spring place apple twigs in water, and watch the development of the buds.

Study a twig bearing blossoms. Which come first, leaves or blossoms? Note the size of the leaves from day to day. Note the size of the leaves when the blossoms open.

Study the blossom.

Compare with cherry, pear and peach.

After the children have observed and studied the tree, bud and blossoms in the springtime, sketch the tree as it appears in bloom; later, as it appears laden with fruit.

Beside making blackboard sketches, the teacher will find it very convenient for her work to have each appearance of the tree reproduced in a large sketch on cardboard for pupils to observe and compare while studying the fruit.

Have children study buds of other trees in a corresponding way.

FLOWERS. — Specimens for the study of flowers are easily obtained during the fall or spring term of the school year.

In the fall, dandelions, asters and golden rod are common plants everywhere. There are many cultivated garden flowers which children will bring if asked to do so.

In the springtime, anemones, spring beauties, violets, daisies, cowslips, dandelions and many others may be obtained in abundance.

Children may be so trained to observe that most valuable lessons are learned in collecting specimens.

Whenever possible study the whole plant.

Tell whether the flower selected grew on tree, bush, or other plant.

Note the size, shape, fragrance and color.

Discover the two cups of the flower.

Note whether the two cups consist of one part or two parts, respectively.

Lead the children to notice the threadlike parts in the center of the flower.

Describe, draw and paint the flower studied.

Make and write many stories on flowers to be read by children.

Tell or read stories from standard authors to be reproduced orally.

If there is a myth or a fable relating to the flowers studied, tell the story to the pupils. Have children reproduce the story and then illustrate it on the blackboard.

"The Dandelion," Longfellow's *Hiawatha*; "The Sunflower," — a myth; "Shower and Flower," "Calling the Violet," Lucy Larcom; "Buttercups and Daisies," Mary Howitt; "The Daisy," *Nature in Verse*; "Little Dandelion," Whittier's *Child Life*; song, "The Little Flower came from the Ground"; song, "The Dandelion."

Have pupils memorize the poem, "How Flowers Grow," page 49, ALTERNATE SECOND READER.

OUTLINE FOR THE STUDY OF AUTUMN FOLIAGE.

Autumn leaves.

(1) Beauty of the leaves.

(a) Color. Why do the leaves change color?

(b) Use.

(2) The fallen leaves.

(a) Cause of leaves falling?

(i) Their work is done. (ii) The tree cannot care for them longer. (iii) Buds need their places.

(b) Use.

(i) To protect seeds and buds. (ii) To protect the eggs and larvæ of insects and other small animals. (iii) To furnish by their decay food for the living plants.

Before having pupils observe autumn leaves, talk with them of the work the leaves have done during the summer. The use they have been to the trees, to man and to animals. By questioning, draw from the children everything that they can be led to observe or find out for themselves, but do not force the work upon them nor try to do work which they cannot comprehend.

Before the foliage begins to change, select trees for pupils to observe. Guide them in their observations. Have them tell what they observe. Use the sentences given by pupils for the reading lesson.

Write the sentence as soon as given.

Have pupils read (silently) as the sentence is being written.

Have the sentence read.

Have pupils write words on blackboard.

Have pupils write sentences on blackboard.

Have leaves and twigs drawn.

Have leaves and twigs painted.

The following questions are given as suggestions for guiding pupils in their work:—

In what parts of the tree do the leaves begin to color (upper or lower part—outside or toward the middle)?

In what part of the tree are the brightest colored leaves?

Where do the leaves begin to change color—at the top or lower part—around the edge or near the veins?

What colors are found?

Which are the prettiest colors?

Have pupils match colors in leaves. Have them match the colors in leaves with colored paper.

Have them paint, using water colors.

Where does the leaf break away from the stem?

How does it break away?

What makes it drop from the stem? What is in its place?

Lead children to see and to think of the work which the leaves have done. There is nothing more for them to do in staying on the tree. Lead them to see that the tree, too, is tired and needs rest. It cannot work for the leaves. The leaves must now give their places to the baby buds.

In what part of the tree do the leaves begin to drop?

Does the tree want her leaves to go? Why?

Lead children to think of the cold winter—the winds and the snow. That the tree is better off without leaves.

Would the leaves be a help to the buds? Have the leaves any more work to do? What?

Lead children to observe and think of the plants and seeds that need protection on the ground and in the ground.

Bring into the schoolroom leaves of the previous autumn showing different stages of disintegration. Lead them to observe and think of the agencies which aid in the decay of leaves,—moisture, wind, heat, earthworms and other small animals. If children are strong enough, that is, if they have had other work to understand it, the teacher may give as information—the fallen leaves protect the eggs and larvæ of insects and other small animals.

Decorate the schoolroom with the leaves and branches collected by the pupils.

With children's help press leaves and arrange them on large sheets of cardboard to aid in reviews later in the school year.

Tell them the story of "The Anxious Leaf."

Have them memorize one of the following poems: "October," "October's Bright Blue Weather," "Down to Sleep," Helen Hunt Jackson; "Come Little Leaves," George Cooper; "When the Woods turn Brown," Lucy Larcom; "October's Party"; song, "Come Little Leaves," "The Stolen Leaves"; game, "The Falling Leaves."

The following should be read by the teacher: Lowell's "Indian Summer Reverie," Bryant's "Gladness of Nature," Bryant's "Autumn Woods," Longfellow's "Autumn," Thoreau's "Autumnal Tints," in *Excursions*.

See outlines and plans, pages 58-60.

ANIMALS. — See outlines and plans, pages 52, 70, 75, 76.

INSECTS. — Insects form most excellent subjects for many of the early conversational lessons.

Confine insects in a box or cage covered with netting, making the new home as nearly like the old as possible. (They should be liberated after use.)

Interest the children in searching for the homes of insects; in watching the method used in obtaining food; in noting what becomes of them in winter.

Make collections of larvæ of various insects. Feed with the leaves of the same kind of tree or bush from which they were obtained.

The spinning of the cocoon, and the perfect insect which later emerges from it, should be noted by the child.

The butterfly, moth, cricket, grasshopper, bee, fly, dragonfly, are suggested.

Tell the children the following stories in connection with the study. Have children reproduce the stories told.

"Aurora and Tithonus," myth; "The Ant and the Grasshopper," fable; "The Wise King and the Bee"; "King Solomon and the Ants," Whittier.

Poems: "Gaining Wings," Edna Dean Proctor; "Bee Song," Kate Douglas Wiggin.

The children should do the talking, the sentences being their own, given in response to questions from the teacher.

The following suggests one kind of work:—

THE WINTER CRADLE.

Grace brought a large green caterpillar to school.

She put it with green leaves into a box over which she put a net.

One day we saw the caterpillar at work. It was not eating. What was it doing? We watched it to find out.

It was spinning — spinning its winter cradle. Now it is fast asleep; or,

The large green caterpillar which Grace brought to school has spun its winter cradle and gone to sleep.

VAPOR. — See outlines, pages 84-87.

THE USE OF PHONICS.

There is a limit to the number of words which the children can learn to recognize at sight. They must therefore have other means of determining the words they meet. They must associate the sound with the form, and be able to recognize a new form through its likeness to those which they already know. Phonic drill or work in slow pronunciation should be begun the first day of school. This is one of the tests which the teacher may use in ascertaining the children's ability to hear sounds in words.

At first the teacher, in telling the children to do something, gives a slow pronunciation to one word in the sentence; as, Find a h-a-t. Bring me a b-oo-k. Get your s-l-a-t. Touch your f-a-c. F-i-n-d a doll. Sh-u-t the door.

From five to ten minutes each day should be given to the work in slow pronunciation, and should be continued until the children are able to detect words given by the teacher, if the words are in their vocabulary. Encourage the children to do the work in slow pronunciation.

The ear should be trained to know the sounds or values of the consonants of the language.

As soon as the children know by sight a few words beginning with the same letters, — as ball, bell, black, blue, boy, — they may be asked to pronounce the words and then give the first sound they hear in each word. Great care should be taken to have the sound given correctly. Tell them that *b* always has that sound and that the sound is made with the lips closed. There should be no sound of that letter after the lips open. In a corresponding way each sound of the consonants may be learned, and learned so thoroughly that the children detect the sound of the letter in whatever part of the word it is given.

With the acquired ability to give the correct sounds of the consonants and those combinations whose values are constant pupils will be able to pronounce any word which occurs in their reading if the word is a part of their vocabulary.

To aid in this work of phonic drill, several pages of the Charts and the First Reader have been devoted to the work in word-building. In this the children are given an opportunity to study and to compare words.

Time for the work in phonics and word-building should not be taken from or given at the recitation time for reading. A special time in the program should be given for this work, which the children should think of as word study but not as reading. The teacher cannot emphasize too strongly that the purpose of reading is thought-getting and thought-giving. Do not let the children help themselves in getting new work by their knowledge of phonics too early in their course of learning to read. This can wait, yet it is most desirable to train their ears and their organs of speech to respond to the sound.

WHAT SHOULD THE BEGINNER READ?

THE vocabulary which the child has acquired during the years preceding his school life, and the vocabulary which may be acquired in a course of systematic talking lessons, must be the verbal material of his early reading lessons. These words are his ready instruments, which he uses when he desires to make others understand him. They are the symbols of things which he knows and loves and with which he plays; symbols of his desires; symbols of his emotions and of his will. The words which he learns before using a book and those learned in connection with the first book should form a community, a symmetrical vocabulary in which the different parts of speech are found in proportion to their use in ordinary speech. This vocabulary should consist of the words and idioms which he uses or may be trained to use in the study of plants, animals, minerals, rain, snow, frost and wind; in conversation about children's toys and other objects; in descriptions of familiar objects and simple pictures; in narrations suggested by pictures; in comparing and in contrasting simple objects; in reproducing myth, fable and folk-lore, and stories of child life.

The child's first efforts in learning to read must be a recognition of the words and the sentences representing his knowledge gained through doing, feeling, thinking, comparing, concluding and imaging. To ask a child to read groups of words (sentences) representing thoughts not his own, before he has had much practice in reading his own composition, is to reverse the natural order of learning; it is beginning with the complex, with the abstract. This

applies whether the object of the reading be the getting of thought or the oral expression of thought.

In each subject enumerated above, most interesting as well as instructive lessons can be made by the children under the guidance of the teacher.

FIRST STEPS IN READING.

While talking the child does not think of the words which he uses as such, but thinks of them as a means of expressing the ideas which he wishes to make known. He learns words for no other purpose. As he has learned to talk, so he should learn to read. Subjects should be selected in which he may be interested, yet these should be on educative topics. For the first reading lessons something fresh and attractive should be taken. Nature furnishes most appropriate subjects in abundance. The time of year and the environments of children will determine what should be selected.

Whatever the subject chosen may be, let the children assist in obtaining the specimens to create an interest in the work at the outset.

The following plan is suggestive of one kind of lesson which may be given in October, through the month of September the children having done much in the study of plant life suggested in preparatory work.

PLAN.

Purpose: To lead children to observe the formation and growth of buds previous to cold weather, as well as the protection provided by nature, and to give definite, accurate knowledge to be represented in words.

Matter: Sentences given by pupils representing what they know and have said.

Material: Apple twigs. (Other twigs, as: elm, maple, lilac, cherry, willow, etc.)

After placing twigs where all can see them the teacher introduces the lesson by repeating the stanza —

“Rock-a-by-baby
On the tree top,” etc.

sketching as she does so a leafless tree and twigs showing buds. The children talk freely, telling what the cradles are and finding them on different twigs.

Ask the children to tell what they see. Each child watches as the sentence is written on the board in good, plain, vertical script.

“What did the chalk say?”

“I see a twig.”

(The sentence should be written three or four times.) “You may write, ‘I see a twig.’”

Each child tries to write the sentence, or at least one word of the sentence. The teacher’s work should be erased before the children write. They are to write from memory. The first attempts to write will be very crude, but if each child tries, does his best, it is sufficient. The work should be judged by the effort made, not by results.

If a child fails, have him watch as the word or sentence is written again on the board, then have him try once more to write it from memory.

Then the sentence, “I see buds on the twig,” may be obtained from the pupils and written for them to read. Write the word *buds* three or four times. Erase. Have pupils write the word from memory.

For seat work the pupils may paint the twig, using water colors, represent the twig with pencil or charcoal on paper, or cut the object from paper. This part of the work is all-important.

Each child should be supplied with an envelope containing the script words found in the sentences written for the pupils to read. With these words the children should

reproduce the sentences, placing them below the paintings or drawings which they have made. Have pupils read the sentences that they make.

Begin the second lesson by writing the sentence, "I see a twig." Ask the children to make true what has been written.

The children take twigs, showing that they have read the sentence and understand it.

Lead them to tell the name of the twig, as, "It is an apple twig; it grew on an apple tree." Write the sentences, and have pupils read them. Write the word *apple*. Erase, and have pupils write from memory. Then have them write the sentence. If they hesitate in writing the word, assist them by again writing it, giving time for a concept to be formed before erasing the word. Then have them write the word *grew*. Question to obtain: "The buds are small"; "They are baby buds." Write the sentences. Have pupils read them. Have them write the words *small* and *baby* from memory.

Add the new words to those in the envelope, and send pupils to their seats to paint or draw the twig and reproduce as many sentences as they can. Examine the children's work, having them read the sentences they have made.

Write the following for pupils to read: —

I see a twig. It grew on an apple tree.

I see baby buds on it.

Have each sentence read as soon as written. If pupils hesitate in reading, write the word and have the children write from memory; then read the sentence.

Have pupils read the first and second sentences after all have been written and read. Then have them unite the two, using *which* in place of "*It*." Write the sentence: "I see a twig which grew on an apple tree." Have pupils

read. Write the word *which*, and then have pupils write the word from memory.

Erase, and send pupils to the blackboard to reproduce the work. Watch the writing of the class. If a mistake is made, erase the word without calling the child's attention to the wrong form. The child should then correct his own mistake, after examining the word rewritten by the teacher.

In the succeeding lesson, lead children to see the protection nature provides for the bud to shelter it during storms and cold weather. (In connection with this, buds of other twigs may be examined.)

See page 39.

The children will give many sentences which should not be written at this stage of their progress in reading. If the teacher is judicious in the selection of sentences, the repetition of words will be such that the pupils will learn the words easily and thoroughly, beside having reading matter that is fresh and interesting to them.

In connection with this work many verbs, as well as the names of the pupils in the class, may be taught, as: "The chalk says, 'Alice, find an apple twig.'"

Alice finds the twig, and the children write the word *find* from memory. In the same way the words *show, take, get, put, let, give, break, make*, etc., may be taught.

By proper questioning, the following idioms may be used in sentences by the children: Here is, here are, there is, there are, this is, that is, I have, who, that, which, on which, in which, etc.

Thus in the study of twigs a variety of reading lessons may be made, each a unit having a sequential arrangement.

The words and sentences to be learned by sight are but the symbols of what the child has said. He learns them as such, not as isolated words. He thus learns to read readily and with little effort.

Fruit may be studied in a corresponding way. See pages 59 and 60.

Whatever the subject taken, cause the children *first*, to know it; *second*, to say it; *third*, to see the sentence or word; *fourth*, to write it, make it with their hands; *fifth*, to read it.

SUGGESTIVE WORK FOR ADVANCED BLACKBOARD LESSONS.

Purpose: To note the departure of birds as the cold season approaches.

THE ROBIN.

"Have the robins gone that had a nest in our tree?"

"In the nest we saw the blue-green eggs from which baby robins came." "We heard the baby robins chirp in the nest." "We heard them sing in the tree; then we saw them fly to the ground and run."

"The nest is in the tree, but no robins are there." "Why have they gone away?"

"Do you know what robins eat?" "They have gone to find worms and insects." "They have gone south, where it is warm."

"The bluebird has gone, too."

"Do all birds go south?"

MY KITTIE.

"I have a kitty that I call Tabby."

"Tabby has a warm fur coat, which is soft and gray."

"She has a round head and a long body." "She has four soft paws."

"Do you know how many cushions there are on each paw?"

"I do, I have counted them."

"Tabby has sharp claws, which she uses to catch mice." "She uses them when she is angry, too." "You cannot see them now." "Why?"

"Oh, they are in the cushions." "That is where she keeps her claws when she does not use them."

"What does Tabby like to eat?"

"Mice. Yes, she likes mice." "How does she catch mice?" "If a mouse is near, Tabby smells it." "Then she moves slyly to it." "She moves so quietly the mouse does not hear her." "As

soon as she is near the mouse, she pounces upon it." "Then her sharp claws help her."

"My kitty has sharp teeth, too."

Simple tableaux arranged in the presence of the class, so that the arrangement may be seen as it takes place, may be made the subject of interesting reading lessons, as:—

"Cora sits in a little red chair, with her large doll in her lap."
"I think Cora has a pretty doll."

After the arrangement has been made, a few questions will bring from the children a good description of the tableau.

Each sentence should be read as soon as written. After the entire group has been written and read, the teacher may give drill on words, as follows:—

"Find the word that tells what Cora does or is doing; the one that tells where she is; the one that shows the size of the chair; its color."

Erase words. Have pupils tell what was erased.

Erase all work. Write one of the new words. Erase, and have pupils write the same on the blackboard.

The children should be trained to write the new word when it is added to their reading vocabulary. By this means they learn to see new words accurately while they are interested in the object, picture, description or story.

If this work is done carefully, they will write their vocabulary in a short time as easily as they recognize it by sight.

For seat work, make such an arrangement of objects as will require the use of most of the words contained in this lesson.

The children should be expected to write from memory from the first. The sentences are suggested by the conditions in which the teacher places the objects. This will be really original composition.

This work may be followed by arranging other tableaux

and by having descriptions of simple pictures corresponding to the work given in preparatory lessons, pages 32-35.

Thus under the guidance of the teacher the little ones make their own reading lessons. With specimen in hand, each is ready to state some fact discovered. While the mind is alert and the mental picture vivid, the written expression is associated with it.

With what eagerness the child watches as the crayon is made to represent what has been said by each. Listen as each sentence is read in the same clear tone that was used in talking!

Why is this natural expression given? Because the child carries to the text a knowledge of expression gained from the oral exercise, and begins to learn the subtler offices of symbols when he applies this knowledge in reading the same.

In the experience of the learner of six years, thought has always controlled expression; he has not used words without a purpose. He should be trained to feel that written language has a purpose, and should be taught to read for the purpose of getting the ideas expressed, not merely to call words.



REGULAR SERIES—CHARTS AND PRIMER.

SUMMARY OF WORK IN FIRST STEPS.

IF the work suggested in "First Steps" be taught well, and continued for six weeks or two months, the average child will know at sight two hundred or more words. He will know them thoroughly, too, for he will have had much practice in reading and in writing sentences, or entire groups of sentences having natural relation or sequential order, in which these words will have been used again and again. He will have become familiar with, and will recognize readily, the idioms, "Here is," "Here are," "There is," "There are," "Where is," "Where are," as well as many other phrases, which he will have been trained to use correctly by using them for the exact expression of what he was first made to see and to know. He will be able to read sentences as involved as those which he uses when talking.

FROM SCRIPT TO PRINT.

The child thus trained is prepared to read with ease the matter found on the Charts and in the Primer of "The Normal Course in Reading." The purpose of this reading is to cause him to recognize at sight the printed symbols of his vocabulary.

By the use of the Charts and the Primer the children are given a great variety of easy reading matter in which a small vocabulary is used. Each word appears in various places and in different relations. This repetition of words in different relations is the kind of supplementary reading

matter which belongs to the beginners' grade. If the children use the new word in oral, written and printed statements in various connections, find it among others, illustrate it whenever possible by drawing, the word becomes their own. Such repetition or drill fixes the word in their minds.

A lesson on the Charts is read; then, in many instances, one supplementing it may be found in the Primer, or *vice versa*. Each lesson is a unit, thus giving the children much practice in reading an entire group of short, easy sentences arranged sequentially. Many of the lessons on the Charts and in the Primer may be supplemented by lessons found in the Alternate First Reader.

In connection with this work the children should have much practice, also, in reading their own compositions which they are led to write. See lessons suggested in preparatory work, pages 32-45.

Let the teacher remember that if education should ever proceed from the known it is in learning to read. The known in the early stages of learning to read is the thoughts expressed by what is to be read and the spoken language expressing them; the unknown is the written and printed symbols, words, signs, sentences. In all this opening work the teacher must be sure that there is a well-established known from which to lead.

The children must be given experiences represented by the words they are to learn, or experiences similar to them.

It is not the purpose of this early work in reading to train the learner to get thought from the printed page. He learns, however, that this reveals thought, because it has so often expressed his own thought. He thus early learns to look for and to expect thought when he reads.

He does not now learn expression from the printed page. He carries a knowledge of expression obtained from the oral exercise to the text and begins to learn the more subtle offices of symbols when he applies this knowledge

in reading. In this way he realizes that reading is talking. The child thus taught will best learn the office of printed symbols.

The transition from script to print should be made so carefully that the children do not feel that there is a change in their work.

All words that occur in the text on the Charts and in the Primer (except those found in the word-building lists) are given in script at the beginning of each lesson.

When the class is ready to make the change from script to print, write one of the script sentences on the blackboard. Have the sentence read. Ask the children to find sentences like it on the Chart or in the Primer (whichever the teacher has for use).

They readily see the resemblances in script and print, and find the sentence in both forms. Give drill in finding corresponding words in both sentences.

Have them read a script sentence found on the Charts or in the Primer, and then find the same sentence in print.

Continue this drill until pupils read print as readily as script.

For part of their seat work, to follow the reading lesson at this stage of the pupils' progress, they should be provided with a box of letter cards.

Write a short sentence on the blackboard. (A careful selection, in which there is a close resemblance in the two forms, should be made at first.)

Ask pupils to make the same sentence, using the letter cards. (Do not print on the blackboard for them. Make independent workers of children, not imitators.)

Carefully examine each child's work. If a wrong letter is used in a word, do not call the child's attention to the mistake, but remove the letter or letters, and ask him to try again. In a short time he will make words and sentences quite rapidly, using letter cards.

Several of the early pages of the Charts and the Primer

are so simple that the children will read them with little or no assistance.

The teacher should know whether they can read the matter or not before asking them to read it aloud.

PREPARATORY WORK SUGGESTED FOR CHART XXV.

After children have observed a shell and read the sentences which they have given in connection with the study, the teacher may write a lesson similar to the following for them to read, after which the pupils may read the lesson on the Chart:—

THE SHELL.

Look at the large shell which I have in my hand.

Is it not a pretty shell? I think it is.

Alice brought this shell for us to see. She found it on the seashore. How did it get there?

The outside of the shell is rough and gray.

The inside, which is as smooth as glass, is of many beautiful colors. Do you see the beautiful rainbow colors in it?

This shell was the home of a small animal. Do you know its name?

Tell children stories of the crustacea.

PREPARATORY WORK SUGGESTED FOR CHART XLI.

If possible have the children observe an oak tree. Talk with them of its size, its rough bark, its strength, its durability, its slow growth, its shade and its beauty. Have them gather branches of oak trees. Have specimens of oak wood.

Give each child an oak twig. Have the twigs broken and cut by pupils. Have them state what they discover.

Show specimens of oak wood.

Have the children try to cut and scratch the wood. Thus lead them to discover that oak wood is hard. (Compare with pine.)

Find furniture (if any) in the room made of oak.

Have pupils give uses of oak wood.

Write and have pupils read the sentences which they give. Have them write all new words. Have them paint or draw an oak twig.

Have many leaves of different kinds of oak trees.

First have the children observe one kind of oak leaves and tell what they see. (Size, shape, texture, color.)

Note the margin of the leaf. Note the venation.



Discover what the veins contain and whence this juice comes ; its use to the leaves.

Write and have pupils read the sentences which they give.

Have pupils write the new words.

Have them compare oak leaves and note likenesses and differences.

Have them mold, draw and paint oak leaves and twigs.

OUTLINE FOR THE STUDY OF THE ACORN.

1. What it is and where it grows.
2. Color.
3. Size and shape.
4. Parts.
 - (a) Cup, — shape, texture, use.
 - (b) Nut, — shape, texture, use.
 - (i) Parts. Shell. Kernel, — what it contains.

Have many acorns for pupils to examine. (If possible have a few that are sprouting.)

Write sentences given by the pupils. Have them write new words. Have them mold, paint and draw the fruit.

Tell the children one or more of the following stories (myths): —
“Baucis and Philemon”; “Rhœcus,” Lowell’s poem; “The Vine and the Oak,” Emerson’s Indian Myths.

Have the children reproduce the story told. Use the reproductions for reading lessons. Do corresponding work with the maple.

Have the children read the lessons on Charts XXXVIII-XLII.

These lessons may be supplemented by the lessons on leaves in Alternate First Reader.

OUTLINE FOR THE STUDY OF THE APPLE.

1. What it is and where it grows.
2. Covering, — color.
3. Size and shape.
4. Dimples.
 - (a) Stem.
 - (b) Eye.
5. Parts.
 - (a) Skin, — color, texture, use.
 - (b) Pulp, — color, cells, juice, use.
 - (c) Core, — number of cells, use.
 - (d) Seeds, — color, shape, parts, use.
6. Uses.

At the beginning of the school year or term, select trees for the children to observe. If possible, an apple tree should be one of the number selected.

Lead the children to tell what they know about the apple tree. Can they tell apple trees from other trees; how? Have they visited orchards? Have they helped to gather apples? Have they seen apple trees in blossom? Do they know the color and fragrance of apple blossoms; the color and shape of the apple leaf; to what color the leaf changes?

Write many of the sentences which the children give; have these sentences read.

Study the apple as outlined.

The pupils should be supplied with apples, otherwise the work should not be attempted.

Write sentences given by the pupils. Have the sentences read. Have pupils write all new words.

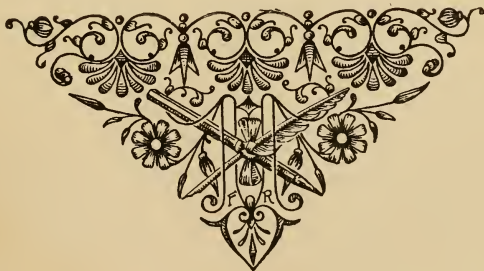
After this preparatory work the pupils will read easily the lessons on the apple given in the Primer. These lessons may be supplemented by the lessons given in the Alternate First Reader, pages 66-68.

Tell the children the story of "The Three Golden Apples," Hawthorne; "Wild Apples," Thoreau; "The Apple," Burroughs; "Planting of the Apple Tree," Bryant; "The Conceited Apple Branch," Andersen.

In a similar way study other fruits.

Compare the fruits studied.

Develop and write many descriptions and comparisons of fruits, to be read by the children. This will furnish them with much supplementary reading matter.



REGULAR SERIES — FIRST READER.

AN examination of the text given in this book shows that the work is based on thought expression. The vocabulary introduced in easy yet progressive lessons consists of the words and idioms which the children use or may be trained to use in conversations about pictures, children's toys, plants, animals, rain, snow, frost and wind; in description of familiar objects and of simple pictures; in comparing and in contrasting simple objects; in reproducing myths and fables and in making stories of child life.

Involved sentences have been used freely in the text, instead of short simple sentences.

The simple sentence does not represent intelligent child thought, for as soon as the child begins to see properly, his constant effort is to express associate thought. The idiom used in involved sentences should constitute a part of the child's vocabulary or his available material for thought expression; while he is learning to read, this portion of it must be given as carefully as any other.

Thus it will be seen that by training the child to see, to think and to express thought, through direct contact with thought material while learning to read, he becomes master of a vocabulary which forms a solid foundation for all successive work in reading.

Very careful attention has been given to the repetition of words in different relations.

Every primary teacher sees the necessity of much repetition of words in sentences before impressions can be made upon the mind of the average child. In many instances

the same words must be seen again and again before they are recognized at a glance.

The subjects presented in this book afford excellent opportunity for much repetition of words in sentences or units of work which the children are led to make in their study of things preparatory to reading the text, at the same time making it possible to furnish additional reading matter on the same subject.

Through direct contact with thought material, they are gaining knowledge; knowledge that is *actual*, for children are taught not *what* to *think* but *to think*, and to exercise their powers of observation and to draw conclusions from their own experience.

There is no good reason why the children should not gain much valuable information during the three or four years they are learning to read. They should not learn to read first. They should get the knowledge, and while getting it should learn to read the words that represent it.

Children who are trained, by the study of things, to see forms, to compare forms for the purpose of discovering likenesses and differences, are better prepared to see words and sentences, forms of words, their likenesses and differences, than if they were undisciplined in this direction.

The child who is trained to see facts in their true relations, and to express in clear, concise English the facts which he sees, will be better prepared to see and to read groups of words representing these relations. By this means he gains power to see thought in groups of familiar words; he discovers that the script on the blackboard and the printed page reveal his exact thought; he acquires the habit of looking for the thought contained in each sentence.

To him reading is thinking, as it should be. He reads for the purpose of getting thought and giving thought. His training should make him unwilling to read a sentence aloud before the thought is mastered, or to leave the printed page before the meaning of the author is compre-

hended. Rightly guided, the child early acquires the habit of looking for the meaning and the uses of words.

What is the result if this training in seeing and in using language for a purpose is neglected? Watch the child as he tries to express what he does not comprehend. Words are pronounced, it is true, but no reading is done; no thought is evolved, no mental pictures are formed, no true enjoyment is derived thereby.

Arouse the child's interest in the subject, and make him feel that observation and reading are the means of obtaining the knowledge which he desires, and learning to read will be his ambition. The boy who reads for his own pleasure learns to read, and will ever be a learner.

The child has a thirst for knowledge, which must be encouraged from the beginning. If this desire is not gratified in childhood, it is not likely to be a moving force in mature years. "The iron must be welded while it is hot, the clay molded while yet plastic, else the clay grows brittle, the iron hardens, and the desired results can never be attained." If a dislike for study is acquired in early years, it is difficult to overcome this dislike in later years.

In the work of learning to read there should be genuine study in the preparation of the reading lesson, — not by the pupils reading and re-reading the text which they are to read at class time, but such study as will cause them to use the words and the idioms which are new to them; not by copying their reading lessons, but by reproducing the thoughts gained by observation or investigation of the subject about which the lesson treats. In their oral and written work they should use sentences (not those found in the text) as much involved as those in the text which they will be asked to read.

By such preparation the reading of the text is made easy, interesting and profitable. Such work is possible in nature study.

The more knowledge the children have of the subject

about which they read, the more easily will they read the text; the more accurate their knowledge, the more intelligently will they read; the better their understanding of the subject, the more profitable will be their reading.

The reading of a story, a description, a poem, depends upon one's power to see, to feel, to reproduce and to image. It is the condition of the mind that determines how much the subject shall mean to one.

Is it not evident that the reading lessons should be on the subjects which the pupils are studying?

As a help in retaining and giving good natural expression in reading, many pages have been given under the head of silent reading. To show that they read silently the children should perform the action described in the lesson, and then read the sentence aloud.

It is all-important that accuracy in expression should be cultivated from the very beginning of the work.

The pictures are excellent for work in description and narration. Many of them represent the plays and experiences of childhood.

By reading the descriptions and narrations which they are led to make the children not only learn the new words in the lesson in the book, but many others. Thus taught they are prepared to read the book lesson easily and well.

The following plans are suggestive of what may be done:—

THE BOY AND THE GOAT.

Lead the pupils to tell what they see in the picture on page 10.

It is as easy to lead the children to say "I see a boy who is driving a goat," as it is to lead them to say, "I see a boy and he is driving a goat."



ETHEL AND THE KITTENS.

“I see Ethel playing with her kittens.” “She has two kittens.”
“One is white, the other is black.”

“Ethel sits in a little chair with the black kitten in her lap.”
“The white kitten is on the floor near her chair.”

“Ethel has a string in her right hand which the white kitty is trying to catch.” “When Ethel moves the string kitty tries to catch it.”

Obtain the subject of the picture from the pupils, and write it on the board.

Have pupils tell what they see. Write one of the sentences given. Have pupils read it. Erase. Write the new words. Erase, and have pupils write the words from memory. Write the sentence again and have pupils read it. Continue the work by having the children (*a*) see, (*b*) say, (*c*) write, (*d*) read.

After the whole description is written have it read as a unit.

Erase, and send pupils to the board to write the description.

In a following lesson the children may be led to tell the story suggested by the picture.

Read the book lesson.

Thus the children's language lessons and reading lessons are on the same subject.



RALPH AND HIS DOG.

“Ralph has a large dog whose name is Hero.”

“One day Ralph and Hero had their pictures taken.” “Tell me how they looked.”



“Here is the picture of a hen running from her nest in the hayloft.” “Back of the hen is the nest, in which are two eggs.” “Ray, who heard the hen cackle, is at the top of a ladder which rests against the hayloft.”

“Do you think the hen likes to have Ray find her nest?”

THE STORY.

“Ray is a little boy who lives on a farm.” “He takes care of the hens, and hunts for their nests, which they hide in the hay in the barn.”

“One day, hearing a hen cackle, he ran to the barn.” “He quickly climbed a ladder to the hayloft, getting there just in time to see the hen running from her nest.”

“Ray was glad to find the new nest with two eggs in it.”

Before having pupils pronounce the words given in the lists on page 22 have them do corresponding work in preparing lists. Say to the children, “Write all the words that you know or can find containing the letter *b*; then write words in which *m* is used,” etc. Watch the work of pupils. If mistakes are made in spelling erase the word without calling the child’s attention to the misspelled word; then have him rewrite. It is the *correct form* which the teacher should impress on the child’s mind. Have pupils pronounce the words which they write. Have them pronounce the words on page 22 in *good natural tones*. This is all-important.

Then have them do the work in word-building as given on page 23. Have them pronounce these words. This should not take the time of the reading recitation, but should be known as word-study; a place in the program should be given it.

Do corresponding work with pages 35 and 48.

Correct pronunciation is an embellishment of speech. Therefore the children should have frequent exercises in pronouncing words which are commonly mispronounced. These lists may be written on the board to be pronounced during the word-study exercise. By this method much may be done toward fixing the habit of correct pronunciation:—

Give the sound of *ö* as heard in the word *clock*. Give it five times. Put the sound into each of the following words.

ö	ö	ö	ö	ö
clock	gone	frog	long	lost
soft	not	song	moss	cost
dog	fog	log	toss	wrong

Give the sound of ū as heard in the word *few*. Give it five times.
Put this sound into each of the following words.

ū	ū	ū	ū	ū
few	blew	tune	tulip	beauty
dew	blue	tube	pupil	July
new	grew	June	music	puny

Give the sound of ä as heard in the word *far*. Give it five times.
Put the sound into each of the following words.

ä	ä	ä	ä	ä
far	laugh	star	arm	path
charm	palm	salve	calf	aunt
half	calm	halves		

Give the sound of ä as heard in the word *far*. Shorten it. Make it as short as possible. This is â. Put this exact sound into each word in the list.

â	â	â	â	â
ask	pass	glass	dance	clasp
master	grass	class	pasture	plaster
cast	draft	last	task	
casket	past	mast	fast	

THE RABBIT.

For the work on pages 50–54, obtain if possible a live rabbit. One of the pupils may have one which he is willing to bring to school.

Have the children note the parts, observing especially characteristic parts. Lead them to see how the parts are adapted to use and environment.

Note the habits of the rabbit, the food it eats, how it obtains its food, its home, the provision it makes for winter, its life during the cold weather.

Write and have pupils read, the sentences which they give.

Have pupils reproduce words and sentences on blackboard and paper.

Have them draw the rabbit.

Read the book lessons.

Supplement the work with lessons on pages 98, 101–103, Alternate First Reader.

THE COW.

Get the children interested in observing cows. Lead them to tell all that they can of the cow's habits and uses.

Study parts from a good picture. Emphasize uses.

Specimens can be obtained for pupils to observe, and experiments may be made, all of which will create an interest in the work.

The following specimens or samples are obtained easily :—

Butter, cheese, tallow (candle), plaster showing hair in it, leather, comb made of horn, buttons made of bone, glue made from the hoof, dried blood, neat's-foot oil made from the hoofs.

Show the children a quart of milk, then set it away for cream to form.

The next day take the cream from the milk, putting it into a bowl. Let a child stir it with a wooden spoon. Children watch, discovering that the oil in the cream separates from the milk, thus forming butter.

Children are led to state in correct language first what has been done.

Write the sentences given and have them read by the pupils. Erase work. Send pupils to the blackboard to write, stating what they have observed.

Watch the children's work. If a word is misspelled, erase it, having the child watch as it is again written on the board. Then erase, and have the child write the word.

Put rennet or acid into milk.

Have the children observe the separation into "curd" and "whey." Lead them to see that the whey is drained off and the curd salted and pressed. After a few days it is rich yellow cheese.

Children are led to describe the process. Matter for another reading lesson is formulated and read.

Thus it will be seen that in the preparatory work the children not only learn the new words that occur in the book lesson, but many others, beside having the best possible training in the use of English.

For the lessons, "Rain," "Clouds," "The Little White Fairies," "Jack Frost," "April," "The Sun and the Wind," study the phenomena according to the outlines given on pages 85-89.

Perform the experiments and lead pupils to tell what they observe.

Write the children's sentences. Have pupils read and then write the new words. This work is especially interesting to children, if done as it should be done.

Memorize poems in connection with the work, as:—

"Sunbeams," "If I were a Sunbeam," "April Shower," "Little Raindrops," from Miss Lovejoy's *Nature in Verse*, and others which the teacher may select.

Study a clock with the children before having them read lesson on page 58. In connection with this lesson, the children should learn to tell time.

Tell them how people told time before clocks and watches were invented. Have them reproduce the work, thus preparing them to read the lesson on page 114, "How to tell Time."

For the lessons, "The Apple Branch," "Lilac Twigs," "Mrs. Apple Tree," study buds according to the outline on pages 39, 40.

Have the book lessons read. Find and make many supplementary lessons.

For the lesson, "What can be found in Ten," the pupils should do the work and discover what can be found in numbers before reading the lesson. The little problems which they can be led to make in their number lessons are most valuable language and reading lessons.

Thus every lesson can be made a means of teaching children to read.

"The Flag of Our Country." Have the children study the flag; note its shape; its colors; the number of red stripes; the number of white stripes.

Tell them why our flag has thirteen stripes.

Note the field of blue and the number of stars. Why this number?

Write the sentences given by the pupils. Have them write the new words. Have them describe the flag. Have the lesson read.

Before reading the lessons, "Beans," "The Tiny Plant," "The Fir Tree," "The Little Fir Tree," have pupils study seeds according to the outline given on page 38. Supplement the book lessons by reading lessons given in Alternate Second Reader, pages 19-29.

"What the Trees Gave." Study the outline for Autumn Leaves.

Have pupils read the lessons in Alternate First Reader.

REGULAR SERIES—SECOND READER.

THE teacher of this book is requested to read carefully and thoughtfully pages 7 to 71 inclusive of this manual. The same careful preparation for reading therein indicated should be continued.

The pupils must be prepared for the book-text by work which will increase their desire to know what the lesson in the book has in store for them. They will take pleasure in learning to read, if they have an interest in the subjects about which they are to read. The greater their interest in a subject, the greater will be their delight in reading about it.

It is not good educational policy to simplify reading matter to the children's standard of untrained expression. It is better educational work to raise this standard of expression to the plane of good English construction. This can be done only by training them to talk well. Talking well involves much more than talking with grammatical accuracy. It involves structure of composition, the sequential arrangement of thought, and the use of the idiom that properly and elegantly represents such arrangement. To learn to talk well, children must learn to see groups of associated thought as entireties. They must see the relations of the parts of such groups or units, if they are descriptions, respecting position, size, color, form, etc.; or, if they are groups of events, respecting time or the relative importance of the events constituting the unit.

The greater part of the work of learning to talk well is that of thoroughly learning something to talk about, and the greater part of teaching a child to talk well, and afterwards to read well, is that of leading him to properly learn

something to talk about and read about. The subjects about which the child should learn and about which he should be led to talk, should be those about which he will afterward be called upon to read.

The work given in this book is based on thought expression. Many of the lessons are drawn from experiences of childhood, and are therefore easily understood by children. There are culture lessons bearing on truth, duty, obedience, unselfishness, politeness, self-respect, love and patriotism; lessons pertaining to industrial pursuits, in which children are especially interested and about which they should know; lessons pertaining to the sports and pastimes of childhood; stories of well-known animals and plants which, if studied properly, will lead the child to see the picturesqueness and natural beauty of his surroundings.

Most of the words used in this book are in the vocabularies of the children who will read it. The children know the meanings of most of the words well enough to use them for the expression of what they want to say, but they do not know the use of many of the idioms used. The use of these must be taught them by conversation. Let the teacher remember, however, that the children must be made to do the talking, and, when talking, must be led to use the proper idiom. After the desired idiom has been secured, it may be written on the board, that the children may learn its form before they meet with it in the text.

If one-half of the time which is usually spent in teaching pupils the mere art of reading were devoted to enlarging their store of knowledge, developing perception by the study of thought material, and training them to tell in good idiomatic English what they have discovered, the children would grasp the meaning of the selections read, do more reading, and read far better than they now do. Growth in power to read understandingly and profitably requires the learner to keep constantly in touch with original sources of knowledge. How often during the reading

exercise a child is asked to re-read a sentence, a paragraph, or a stanza for the purpose of giving better expression to the reading! The desired expression is not secured by the repetition. The child fails to give the correct expression, because he does not comprehend what he reads; the idiomatic language employed is not a part of his verbal possession, and his expression is but the index of his mental state. He has nothing with which to understand.

It is inconsistent with reason and common sense to ask a child to read and re-read a selection, and then explain the meaning of words, phrases and idiomatic expressions. Study, *genuine study*, of the subject should precede the oral reading.

By this method of learning to read the children will be able to read understandingly, not only the regular reading lesson, but the many selections which supplement the reading lesson. Supplementary reading, to be of value, should supplement the lesson, and be read in connection with the lesson given in the reader used by the pupils.

Much of the so-called supplementary reading used for sight reading does the children an injury. They may call words at sight, read readily, give proper inflection and emphasis, and yet not comprehend what they are reading. They thus form a habit of reading without thinking of what they read — the worst of habits.

The children's training should make them ready in asking questions about the meanings of phrases which they do not understand. Their training should make them unwilling to let a word or sentence pass of whose meaning they are ignorant. The teacher should appreciate the significance and importance of this.

The children should be made ready to read the lessons of this book by work adapted to the lessons respectively. Definiteness of purpose should characterize every preparation. There should be variety of methods in the work of preparation.

The good teacher will give as much variety to this work as is found in the topics on which the lessons treat, increased by the variety found in the forms of their settings.

The children may be prepared for most of the lessons by properly conducted conversation, they doing most of the talking, although objective work will add greatly to the value of such conversations. As the talking lesson proceeds, let the difficult words, new phrases and involved sentences be written on the board to be read by the children. All of this work should be sequential in its order, accurate in the expression of exact thought, correct in its grammatical construction, and, while showing variety in arrangement and expression, should involve the use of the difficult new words and idioms of the text.

For the lessons, "The Violet's Gift," "The Bloodroot," and "Marsh Marigolds," study the plants and flowers according to the outlines given on page 41.

Have pupils reproduce on the blackboard or on paper the oral lessons. Have them read their written work.

Supplement the book lessons by lessons given in Alternate Second Reader, pages 9-28, 50-61.

Study fruit according to outline, page 59, before reading the lesson "Treasure Boxes." Supplement the book lesson by lessons given on pages 61-72, Alternate Second Reader.

Study autumn leaves (see outline page 42) before reading the lessons, "The Anxious Leaf" and "October's Party."

Have children blow soap bubbles and give the process of making soap bubbles before reading the lesson on page 32.

Describe the picture. Have them read their descriptions.

Tell the story of "Iris." Have pupils reproduce the story.

THE ROBIN.

Have the children observe robins about their homes.

Note the robin's return, nesting, feeding young, songs, etc.

From a stuffed specimen, note size, shape, covering, parts.

Lead the children to see how parts are adapted to habits.

Characteristic parts and habits should receive most attention.

Write the work obtained from pupils. Have pupils read what is written.

Tell them good stories of the robin from standard authors:—

“How the Robin Came,” by Whittier; “The North Story of how the Robin got its Red Breast.”

Have children reproduce in good idiomatic English all stories told. Use the reproductions for reading lessons.

Have them draw the robin and color appropriately. Have characteristic parts drawn. Have nests made and drawn.

Have the lessons read that are found on pages 38, 40, 48 and 49. Supplement these lessons with work found on pages 98–110 inclusive, in the Alternate Second Reader.

Encourage the pupils to find stories of the robin in their home reading and bring to school to read at class time.

Have a good stanza or whole poem memorized by the class, as: “How does the Robin build its Nest,” etc.

THE HEN.

Study a hen as suggested in the outline for the study of the robin.

In connection with the study of the hen, some member of the class who has chickens may be able to tell of the varied and expressive language of the hen.

If disturbed on her nest she resents with a scolding note. After laying an egg her joy is expressed by a “*cackle*.” To quiet the brood nestled under her broad, protecting wings, she has a gentle “*soothing croon*.” Her little flock is kept near her by her frequent “*cluck, cluck*.” When food is discovered, she divides and shares it with a “*chuckle*.” In danger she gives a cry of warning.

The promptness with which the chickens obey should be especially noted.

Study the duck or goose.

Compare the hen and the duck.

Have pupils reproduce work on blackboard and paper. Watch carefully the written work. If words are misspelled, erase, and have pupils watch as the word is written in correct form, after which have them write the word from memory. Have them read what they write.

Read the lessons, pages 52 and 62. Supplement these lessons with lessons pages 73–92, inclusive, in Alternate Second Reader.

Obtain other books containing lessons which will supplement these lessons. Have pupils transform the poem “Advice.”



INDIA RUBBER.

Material: Rubber and many articles made of rubber. Turtle shell and palm nuts.

Lead children to describe the picture.

Have them write after the oral description is given.

Have them read their descriptions.

Lead them to tell the story which the picture suggests.

Reproduce the story on paper.

Have the children read their stories.

Tell them of the country in which rubber trees grow.

Have them read the book lesson silently before reading it orally.

Have pupils reproduce the lesson without reference to the book.

MAKING PAPER.

Material: Different kinds of paper.

Collecting rags.

Where taken? Paper mill.

Sorting, removing buttons, pins, hooks and eyes, etc.

Cleansing. Soaking and boiling in soda water.

Cutting by a machine furnished with sharp knives.

Put into a vat called a "draining chest," where the water is drained from the rags.

Pasty mixture bleached with chloride of lime, after which it is again put into the machine, where it is boiled, washed and chopped until it looks like thick cream.

Put into a vat, where it is beaten and churned until it is just the right thickness.

Put into a machine which spreads the pulp over wire sieves, which strain it.

Pressing. Drying.

Sizing, if letter paper. Polishing.

Ruling, cutting, sorting, counting, making into packages ready for the market.

If possible, go with the children to a paper mill.

Tell them the process of making paper, using the utmost care both with the structure of the thought and with the construction of the sentences. Then let them reproduce the same, being guided in securing sequential arrangement of thought and purity of language. As the reproductions develop let them appear on the board, to be read by the children.

Have them read the lesson on page 80.

Have them write the process of making paper, from an outline placed on the board.

The written work should be watched by the teacher, and each child should be led to correct his mistake when it is made.

Tell the children a story of the first paper-makers.

Follow the plan suggested above. Have the book lesson read, after which have children reproduce the story from a good outline.

Then give them the process of making "Wood Pulp."

These lessons should be taken as a group or unit of work.

After the work has all been done as suggested, the children should read the three lessons consecutively. Several other stories on the same subjects should be found for them to read.

Do corresponding work in preparing pupils to read the lessons on pages 90, 91, 93, 102, 107, 124.

THE WAGON.

Lead the children to describe each picture given in this lesson.

As the description progresses let the difficult words, new phrases and involved sentences be written on the board, to be read by the children.

After giving the oral description, have pupils reproduce it on the blackboard or on paper.

The following illustrates what the pupils will write after the oral work.

AN OLD-FASHIONED DRAG.

This picture represents one method of carrying goods before the wagon was invented.

Across the back of a horse is a pad, to each side of which a pole is fastened. The poles are so long that the front ends extend above the horse's head, while the other ends drag on the ground.

The poles are fastened together with crosspieces. This was called a drag.

A large bundle is tied to the drag.

The horse trots off as if the load were not very heavy.

Don't you think goods carried in this way would be injured by hitting rocks and stumps?

Have pupils read their descriptions. They are then prepared to study and read silently the book lesson. Have the book lesson read.

Have the children, without reference to the book, write a reproduction of the lesson.

Do corresponding work for the preparation of pupils in reading the lesson, "Modes of Travel," page 142.

Study the bee, the moth, the fly, the ant and the grasshopper as suggested in outline, page 44.

Have pupils reproduce in writing the oral work.

Have them read what they write.

Have them read the fables, "The Fly and the Moth," "The Ants and the Grasshopper."

Have them reproduce these without referring to the book.

Supplement these lessons by work given in Alternate Second Reader, pages 111-133.

REGULAR SERIES—THIRD READER.

THE chief work in teaching the child to read is that of giving him information from other sources than the printed page.

It is requisite first in teaching children to read Third Reader text that they be prepared for the work. Not yet are they to "read that they may know." They are to be made to know in advance of the attempt at learning to read, that they may properly and easily acquire that power.

The children must be prepared for the reading lesson by such work as will give them knowledge of the subjects about which they will read, and at the same time will create in them a desire to know more of these subjects.

The teacher may be certain that the more the children know, the more easily will they learn to read; the more accurate their knowledge is, the more intelligent will be their reading; the more nearly the text represents what they know and have expressed, the more enjoyable will learning to read be to them.

The teacher, therefore, must prepare himself to give broad and accurate information on those subjects of which the lessons treat, the information in every instance to precede the reading lesson.

In this preparatory work the lessons should be as carefully planned as are any other lessons of the school. The plan in each instance will be suggested by the text, which of course the teacher must read in advance. In the development of these lessons the child should be made to do most of the talking. The utmost care should be exercised to have the child talk correctly; to have him as far as prac-

ticable use the language of the text, especially the technical part of it; to use sentences that are as involved as those of the text; to pronounce the words correctly; to use the voice in natural, conversational tones. The transition from such intelligent conversation to the reading of matter corresponding to what has been said is thus made easy, interesting and profitable.

Children “stumble” over words whose meaning or whose relations they do not know, and over these alone. How wise it is, then, to cause them first to know the words they are to read, and to know their uses in relations as involved as those in which they will find them when first met with on the printed page.

How could the correct use of language be taught more profitably than in the way suggested above? The first language lessons and the first reading lessons should be on the same subjects, and should be essentially the same matter. As language lessons, they should proceed from seeing, doing and knowing; as reading lessons, they should proceed from the expression of what has been seen or done and is known.

The children should be prepared to read the lessons that relate to geography by exactly such work as would be done if the purpose were to teach them the facts given as geography lessons.

This means, according to circumstances, journeys to the fields or woods; work with sand maps; work in drawing maps; work in examining products, etc. The children should know this, not as work preparing them for the reading lesson, but as delightful employment in getting information. The reading should be to confirm what they have learned by other means.

If the lesson is historical, the children may be prepared for it by the examination of articles of dress, or other

things showing modes of life or conditions of the people, and by conversation about them; by having narratives and descriptions read to them, which they are to reproduce; by an examination of pictures and intelligent conversation about them, etc.

It will be found an easy matter to interest a class in the children of other lands by talking about them, reading anecdotes about them, showing interesting articles of wearing apparel or playthings, about all of which the children must be made to talk.

The children's interest must be kept up. They must be made aggressive. How easy it is for the teacher to create a strong desire on the part of the child to read about Columbus, Washington or Lincoln, by conversation that will give them the words and their relations as they will be found later on the printed page!

The children should be prepared to read the lessons relating to the humanities, intemperance, selfishness, generosity, etc., by practical lessons, or by story or anecdote, giving them correct, definite ideas, broadening their view. They should then reproduce words, idioms and involved sentences corresponding to those which they will be called on to read.

The children may be required to define words or give synonyms. The result of this should be to make them strong in seeing the meaning of words as they are used. They need no dictionary for this work. The dictionary will be a disadvantage. The teacher should be careful to make the children see that a noun must not be defined by a verb or a verb by a noun; an infinitive by a participle, etc. The result of this should be to make them see meanings in forms of words. The printed page should have more meaning to children than it usually has. It ought to do much, and may easily be made to do much, toward teaching them the grammar of the language.

It is excellent work to require children, after reading a

passage making an assertion concerning a form or other condition, to verify the same by reference to the object, picture or other source from which the information is obtained.

The children may with profit be caused to re-read sometimes, holding in their hands the object or picture, or pointing to it, verifying what they read. This will greatly aid them to read naturally or as they talk. The reading should be a talking from the book. While one reads, let the other children of the class listen, with closed eyes, to what is read, after which let them decide whether or not the one reading read as if he understood what he read, and whether or not he so rendered it that others could understand it.

It is profitable work for pupils to describe pictures that might be used for illustrating lessons which are not illustrated. It is also profitable for children to draw such illustrations on paper or blackboard. After such words or pencil pictures have been made it is most profitable to have the text re-read.

Care should be given to the pronunciation of words when the lessons are talked about; especially should this be true of the new words of each lesson, that the children may pronounce such words correctly when they first see them in the text. The difficult new words should be written on the board for drill in pronouncing and spelling. (The idioms should be written and read as entireties.)

Children may be trained to use and to control the organs of speech by much practice in sounding the consonants. Instead of urging the pupil to "read louder" when he is not understood, he should be trained to speak distinctly. It will be found that the child needs to be shown how to adjust the organs of speech, that he may properly and distinctly make the sounds represented by the consonants respectively. Careful work will secure distinct and pleasant speech.

The "Phonic Drill Chart" on page 221, the key words

for which have been selected with great care, can be made especially serviceable in training children in the elements of enunciation. The frequent use of this table will not only familiarize them with the various sounds of the letters, but will acquaint them with the diacritical marks employed to distinguish those sounds. The "List of Words for Pronunciation" can be used to illustrate the application of the markings and to extend the drill in enunciation.

It may be a good plan occasionally to have the children hunt in this list for a given word, especially one that has been mispronounced, to see if its correct pronunciation can be determined by them from the markings employed. Such work, intelligently done, a little at a time, leads naturally to an appreciative use of the dictionary later on. At first no word not known to be included in the list should be asked for.

Study "Vapor" as suggested by the following outline:—

Have the pupils study and read lessons 4, 9 and 27.

Read the work on "Vapor" given in the Alternate Third Reader.

Read Andersen's "The Story of a Year," "The Snow Man."

Read other descriptions, poems and stories about the phenomena.

Songs: "The Rain," "The Snow Clouds," "Tiny Little Snowflakes," "A Million Little Diamonds," etc. Other songs pertaining to the subject.

Have frequent compositions.

Have pupils memorize poems relating to the subject studied.

Tell them appropriate myths in connection with the phenomena studied. Have them illustrate and reproduce the stories.

The following are suggested: "Apollo's Cows," "Aurora's Tears for Memnon," "Thor and his Hammer," "Iris," "Neptune," "Thetis."

Air:

1. Some of its properties:

- (a) It is tasteless.
- (b) It cannot be seen.
- (c) It is transparent.
- (d) It can be felt.
- (e) When heated it rises.

Vapor :

1. Evaporation and condensation :

- (a) Give many illustrations of the "drying" that is constantly going on from every moist surface.
- (b) Show that heat changes water into vapor.
- (c) Show that the coolness of the air changes its vapor to water-dust.
- (d) Show that warm air changes water-dust into vapor.
- (e) Show that the air is full of moisture.

2. Sources of vapor :

- (a) Water changed to vapor by artificial heat.
- (b) Water changed to vapor by the heat of the sun : from brooks, rivers, lakes, etc. ; from streets, grass, trees, etc. ; from every wet surface.

3. Different forms of vapor.

(a) Dew. Show —

- (1) That vapor in air is changed to water by chilling the air.
- (2) That cold grass, leaves, etc., at night chill the air near them, changing its vapor into water-dust.
- (3) That dew is more noticeable on certain nights than on others.

(b) Frost :

- (1) The frozen dew on grass, leaves, etc.

(c) Clouds. Show —

- (1) That the air is full of vapor.
- (2) That contact with cold air changes the vapor to water-dust, that floats in the air in different and changing forms.

(d) Rain :

Show that by the uniting of the floating drops of water or water-dust, larger drops, too heavy to float, are formed.

(e) Hail :

Frozen rain.

(f) Snow :

Frozen water-dust.

(g) Sleet :

Snowflakes partly melted by warm wind.

(h) Fog, Mist, etc.

Changes of weather noted each day ; make weather charts ;

changes in length of day noted; changes in length of shadows; direction of wind, etc.

EXPERIMENTS.

Air :

1. Properties :

For (a), (b), (c), (d), no experiments need be suggested.

(e) When heated, air rises :

- (1) Hold the hand over lamp, over register, over candle, over radiator, etc.
- (2) Hold piece of smoking paper in fireplace. Use the smoking paper in (1). Current of air may be seen carrying the smoke.
- (3) Hang threads, pieces of paper or spiral cut from paper, over lamp, register, candle, etc. Currents of air move them.

2. Air in motion :

(a) Draughts :

- (1) Place a lamp chimney at the edge of table over a short candle. Hold smoking paper at the side of lower opening. Direction of currents—draught—shown by smoke.
- (2) Hold burning candle at cracks of doors and windows; at fireplace, ventilating shafts, etc.

Vapor in the air :

1. Evaporation and condensation :

- (a) (1) Moisten slates with damp sponge; observe the disappearance of water.
- (2) Observe water in shallow dishes in the schoolroom; in tumblers, marking the decrease day by day.
- (3) Observe the drying of pavements after rain.
- (4) Observe the drying of clothes hung on lines.
- (5) Dip the hand in water and wave in the air.
- (6) Pour a few drops of alcohol on slate; observe the rapid disappearance.
- (7) Heat water over a flame; it disappears.
- (b) (1) Heat changes water into vapor.
- (2) Teakettle and oil-stove or alcohol lamp. By constant boiling water disappears.
- (c) (1) Hold a plate or tumbler in the cloud of steam; it will be covered with fine drops, showing that the water of the kettle has gone from the kettle into the air.

(2) Hold a cold dry plate close to the mouth of the spout, where *nothing can be seen*. The plate becomes covered with drops of water, showing that this clear space was filled with water that could not be seen — vapor.

(d) Hold a lighted candle under the cloud of water-dust issuing from the spout. It disappears — is changed by the heat to vapor.

2. Sources of vapor.

(a) Artificial heat.

Heating of liquids on stoves and with gas; drying of clothes before fires, etc.

(b) All parts of the earth are heated by the sun. Air coming in contact with heated portions is heated and rises. The surfaces of bodies of water or bodies that are wet and moist are heated; the water is gradually changed to vapor, which is carried in the rising air in all directions and to great heights. Use experiments given to illustrate this.

3. Different forms in which the vapor is seen.

(a) Dew:

(1) Carry a dry pitcher into the schoolroom. Fill it with ice water. Observe drops forming on the outside. Vapor in air is changed to water.

(2) Breathe on window glass or mirror. Dimness due to condensation of moisture in breath.

(3) At night grass, trees, walks, etc., become cool, owing to the absence of sun-heat. The air coming in contact with them is chilled, and the vapor is changed to water, as on the pitcher.

(4) Variation of amount of dew, due to variation in the amount of moisture in the air and in the coldness of objects.

(b) Frost — frozen dew.

Why is it on the inside of windows? Observe the change from frost to dew and from dew to vapor under the influence of sun-heat. Study this on a frosty morning.

(c) Clouds:

Use experiments described under vapor, — teakettle and stove, etc.

Observe the appearance of a cloud in a clear sky and its sudden disappearance, also changes in form.

(d) Rain :

In holding the plate in the cloud of steam, observe how the water-dust gathers into drops that roll down the plate.

(e) Hail :

Bring the hailstones into the schoolroom.

(f) Snow :

Examine the crystals ; draw the forms on the black-board. Observe the change into water and the change of the water-drop into vapor.

(g) Sleet, fog, mist : as suggested by experiments. Fog and mist are clouds near the surface of the earth.

SUGGESTIONS.

1. Do not attempt to teach more than the children can understand.

2. Require them to bring into school the results of their own experiments and observations.

3. Give the above lessons when the weather conditions are such as to admit of actual observation of phenomena.

BOOKS OF REFERENCE FOR TEACHERS.

Science for All, Vol. I., "Ice, Water and Steam, Air and Gas." Vol. II., "How Sunshine warms the Earth," "Why the Rain falls." Vol. III., "Why the Clouds float and What the Clouds say," "Dew and Hoar Frost," "How a Snowflake is formed," "How Hailstones are forged in the Clouds." Vol. IV., "Fogs."

Paul Bert's *First Steps in Science*, Tyndall's *Forms of Water*, Buckley's *Fairyland of Science*, Shaler's *First Book in Geology*, Geikie's *Physical Geography*, Huxley's *Physiography*, Heilprin's *The Earth and its Story*.

THE SEASONS.

During their study of nature the children have been led to observe the coming and going of birds, and to note the time of year of each ; they have observed the birds that do not leave, and the kinds of homes built by many birds ; they have observed the preparation which man, animals

and plants make for cold weather; they have observed the coming of snow, the coming of flowers, the length of the days and the changing position of the sun with each change of season.

With this knowledge gained by observation they are prepared to understand to some extent:—

(1) The cause of day and night, (2) the cause of change of season, (3) the rapidity with which the earth travels, (4) the distance traveled each year.

Material needed.: A globe 8 to 12 inches in diameter; a smaller globe suspended by a string; a lamp.

Tell the story of Magellan; trace his voyage on the globe.

Show the rotundity of the earth by use of the globe, illustrating the disappearance of ships at sea.

Give other proofs of the rotundity of the earth.

Cause of day and night.

Tell the story of Galileo.

Ask the children simple questions, like the following:—

When we have night what do the people have who live on the other side of the globe?

Why does the sun seem to rise in the east and set in the west?

Cause of change of seasons.

Does the sun always seem to rise in the same place? Why?

Illustrate by use of globe and lamp.

Have pupils study and read lesson 13. Supplement this lesson by lessons given in Book II., *The World and its People*.

Find other lessons on the same subject for pupils to read.

Study and read the poems, pages 75–82.

Lockyer's *Astronomy and Primer* will be helpful to the teacher.

THE SUNRISE.

Before reading lesson 17, "The Sunrise," get children interested in seeing the sun rise. Have them relate what they observe. Lead them to write a description of "Sunrise."

Show them Guido Reni's picture of "Aurora."

Tell them the myth "Aurora." Have them reproduce the myth.

Study and read lessons 17 and 39. Supplement with other lessons relating to the subject. Read the poem on page 98.

Tell the stories of "Phaeton," "Apollo," "Baldur."

THE MOON.

Have children state what they observe of the heat and light of the sun, the moon, the stars.

Lead them to see and note reflected light : (a) appearance of west windows at sunset ; (b) the reflection of lamps and fires in mirrors ; (c) the apparent light in windows from the reflection of street lamp, head-lights of locomotives, etc.

Have pupils observe the full moon — note its position in reference to the sun.

Call attention to the dark patches on the full moon. Tell the story in *Hiawatha* showing what the Indians thought.

Show the cause of the *phases* of the moon, illustrating with globe and lamp.

Show by use of globes and lamp the revolution of the moon around the earth.

Let the children note the time from new moon to new moon.

Teach the meaning of the names of the months.

THE SUN'S FAMILY.

Get the children interested in observing the sky in the evening. Let them know an evening star — Venus or Jupiter — and note that it changes its position among the other stars. Tell them of the evening star in Longfellow's *Hiawatha*.

Lead them to know the North or Polar Star. Let them observe the needle of the compass or other magnetic needle point towards it. The use of the pole star to sailors.

Show them some of the constellations — as the Dipper or Great Bear, etc.

Tell them the myth of "Callisto," "Hercules."

Show good pictures representing the myths told.

Lead them to see the difference between fixed stars and planets.

Have them study and read lesson 25.

Read other lessons relating to this subject.

In review read lessons 13, 17, 25, 33, 39 consecutively.

BOOKS OF REFERENCE.

Fiske's *Myths and Myth Makers*, Mooney's *Foundation Studies in Literature*, Cox's *Mythology of the Aryan Nations*, Bulfinch's *Age of Fable*, Emerson's *Indian Myths*.

Supplement lessons 1, 5 and 11 with lessons on plants, Alternate Third Reader.

Before reading these lessons have pupils study seeds and buds according to outlines given on pages 38-39.

A LITTLE BREEZE.

Study the poem with the children before asking them to read it aloud.

Be very sure that they know what is meant by "saucy"; by "Fresh with the breath of summer seas"; by "rippled"; by "It splashed the fountain's falling spray"; "the daisies' golden hoard"; "the fountain's silver spill."

Lead the children to state in their own words the comparison made.

SELF-CONTROL.

Lead the children to feel and to appreciate the meaning of the term *self-control*. See that they know the meaning of kingdom, and that they understand the meaning of the proverb, "He that ruleth his spirit is better than he that taketh a city."

Lead the children to tell ways in which the spirit makes trouble for its ruler.

See that they understand the meaning of the term *intemperance*.

Lead them to see that one may be intemperate in running, jumping, dancing, bicycle riding, eating, etc.

Make clear to them the harm resulting from over-eating, or in eating food which cannot be digested.

Lead them to see that one may have an appetite for things that are harmful, as tobacco, beer and strong drink.

Show why tobacco is harmful : (a) it contains poison ; (b) it causes disease ; (c) it hinders growth in every way ; (d) it is a filthy habit ; (e) it is an expensive habit ; (f) it leads to a desire for strong drink.

Lead pupils to see that the best way to keep control of one's self is to avoid bad habits.

During the conversation with pupils, write the difficult words, phrases and idioms given.

Have them study and read lesson 12.

Have them reproduce the lesson.

THE INDIAN.

1. Appearance of our country when inhabited by the red men.
2. Personal appearance of the Indians.
 - (a) Body : large, strong.
 - (b) Skin : reddish or copper-colored.
 - (c) Eyes : dark and deeply set.
 - (d) Hair : long, straight, black.
 - (e) Face : beardless.
3. Disposition : fierce, cruel.
4. Dress : material, how made.
5. Ornaments : beads of wampum, hedgehog quills, ermine, swan's down, tails of foxes ; faces and bodies stained with colored earths and juices of plants.
6. Houses.
 - (a) Holes dug in the ground.
 - (b) Caves cut in the sides of rocky cliffs.
 - (c) Wigwams or huts : material, how made.
7. Furniture.
8. Food : how obtained and prepared.
9. Weapons : material, how made.
10. Occupations.
 - (a) Hunting : weapons, — bow and arrow, tomahawk.
 - (b) Fishing : nets and traps.
 - (c) Agriculture : Indian corn, how cultivated.
 - (d) Manufacturing : canoes, baskets, — material, how made.
11. Picture writing.

Tell children of "Hiawatha's Childhood," "Hiawatha's Friends," "How the Canoe was Made," Longfellow's *Hiawatha*.

Tell them other Indian stories from Emerson's *Indian Myths*.

Have them reproduce the talking lessons and the stories told them.

Have them make a wigwam, bow and arrow, nets, canoe.

Have them mold a canoe, tomahawk, utensils used in cooking, etc.

Have pupils read lessons 3 and 44.

The World and its People, Book I., Lesson 33.

Supplement with other lessons which may be found on this subject.

BOOKS FOR TEACHERS.

Thatcher's *Indian Biography*, Frost's *Indians of North America*.
 Catlin's *North American Indians*, Ellis's *The Red Man and the White Man*, Kingsley's *Man*, and Wood's *Man*.

A JOURNEY TO ESKIMO LAND.

1. Situation of the home of the Eskimos.
2. Appearance of the country.
 - (a) Ice and snow, frozen ground.
 - (b) Vegetation : no trees, little grass, moss, trailing vines and shrunken berries.
 - (c) Animals : polar bear, whale, walrus, seal, birds, fish.
 - (d) Sun, day and night, Aurora Borealis.
3. Personal appearance of the people.
4. Dress : material, how made.
5. Homes : igloo, how built.
6. Furniture, utensils.
7. Food : how obtained, weapons used.
8. Modes of travel.
 - (a) Sledges : material, how made.
 - (b) Dogs : harness.
 - (c) Boats : kinds, how made.
9. Occupation.
 - (a) Hunting : bow and arrow.
 - (b) Fishing : harpoon, spear.
10. Education and treatment of children.
11. Sports, etc.

Have pupils make house, lamp, bed, sledge, harness, boats, bow and arrow, harpoon, spear.

Have them mold blocks out of which house is built, dogs, seal, utensils used.

Have them paint and draw the above.

During the talking lessons write on the board the difficult words, phrases and idioms which the children use.

At the close of each lesson have the pupils reproduce on paper what has been said.

Have them read lessons 26 and 28.

For supplementary work read Agoonack, *Seven Little Sisters*.

BOOKS OF REFERENCE FOR TEACHERS.

Children of the Cold, *Search for Franklin*, Schwatka, *The World*, Kirby ; *St. Nicholas*, 1885 ; *Wide Awake*, April, 1889 ; *Harper's Magazine*, Vols. XXII., XXIX., LII.

COLUMBUS.



Birth : time and place.
 Early education.
 Place in which his boyhood was spent.
 Inclination for a sailor's life.
 Ideas most people had of earth's
 shape.
 Views of Columbus.
 Plans for a voyage to test his views.
 Applications for aid.
 Ferdinand and Isabella.
 Fitting out vessels.
 Voyage: when made and results.
 Other voyages.
 Treatment during life.

Tell pupils the story of Columbus, following outline.
 Have them reproduce the story orally and on paper.

Have them study and read lesson 6.

Have them read other stories of Columbus.

Without reference to the text, have pupils answer the questions at the close of lesson 6, or tell the story from a good outline written on the board.

Have as many good pictures as possible to use in the study of Columbus.

GEORGE WASHINGTON.

Birth : when, where.

Parents : devotion to George ; training.

Education : sports, sham battles, etc.

Occupation during latter part of youth : surveyor.

Service in the French and Indian war. Rank: major.

Resignation of Washington.

Service in Revolutionary War.

Rank: Commander-in-chief.

Loved and respected ; why.

Result of war.

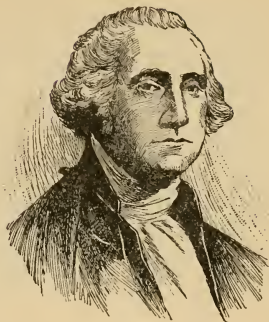
Elected President.

Served eight years.

Refused to accept a third term.

Laid the foundation for a free and happy country.

Called the "Father of his Country."
Why.



From the above outline tell the children the story of Washington. Have them reproduce the story.

Have them read lesson 10 and the poem, "The Twenty-second of February."

Give them other stories of Washington to read. Ask them to find and bring to school stories of Washington.

Put a good outline on the board to guide the children in writing the story of Washington.

MOUNT VERNON.

Where situated.

Describe the house from the pictures represented on pages 103 and 105.

Built on a hill overlooking the Potomac.

Lawn: well kept; grove, now in which tame deer sport.

Cabins for Washington's servants.

Interest in the welfare of his servants; treatment of them.

Surroundings.

Interior of the house.

Attendance at church.

Lover of animals.

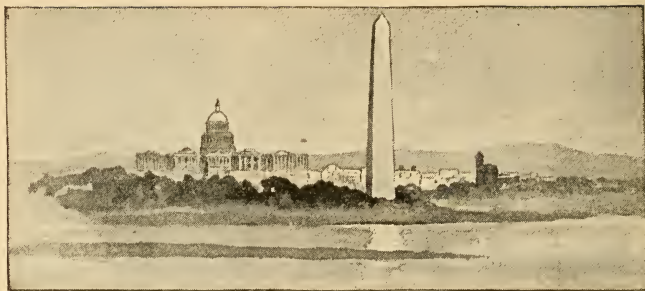
Mount Vernon now owned by a society of ladies.

Burial-place of Washington and his wife.

Have pupils write a description of Mount Vernon. Secure large pictures to supplement the ones in the book.

Read lesson 18.

Have children read other lessons relating to Mount Vernon.



THE WASHINGTON MONUMENT.

Where erected.

Shape, material, height, size of base.

Top reached by means of both elevator and stairs.

Inside lighted by electricity.

Slabs of stones with appropriate inscriptions : by whom sent ; for what purpose ; where placed.

Surroundings : sloping lawns.

Have lesson 24 studied and read.

Have pupils write a description of the monument after reading the lesson.

In review, have pupils read lessons 10, 18 and 24 consecutively.

BENJAMIN FRANKLIN.

Parentage.

Birth : when and where.

Education.

Apprenticeship.

Leaving home : going to Philadelphia.

Occupation : printer.

Character as a philosopher.

Editor of *Poor Richard's Almanac*. Maxims.

Part taken in the Declaration of Independence.

Taking messages to foreign countries.

Electrical experiments : lightning-rods.

Ruling motive of his life.

Tell the story of Franklin, following outline.

Have pupils reproduce it.

Study and read lesson 36.

Pupils will be interested now in reading Franklin's Autobiography.

LAFAYETTE.

Birth : when, where.

Home : environments.

Coming to America : age ; for what purpose.

Fitted a vessel at his own expense : why.

Landed : Charleston, South Carolina.

Went to Philadelphia : why ; how.

How received by Congress.

Became an " aide " to Washington.

Life-long friendship between Lafayette and Washington.

A brave soldier.

His return to France for help.

Influence with the French Government.

Return to France at close of war.

Visits to America.

Noble and unselfish nature shown how.

His memory cherished and name honored by Americans.

Tell pupils the story of Lafayette, following the outline.

Pupils reproduce the story orally.

Study and read lesson 16.

Supplement the work with other lessons pertaining to Lafayette.

THANKSGIVING DAY.

Meaning of " Thanksgiving."

When did the custom begin ? Who inhabited America then ?

The " Mayflower." Plymouth Rock.

Appearance of the country.

Miles Standish. Samoset and Squanto.

The first winter.

Planting of corn.

The first Thanksgiving. Massasoit and his friends.

A day of rejoicing.

Made a national holiday. Appointed by whom.

Study and read lesson 22.

REGULAR SERIES — FOURTH READER.

THE teacher is asked to read carefully the suggestions given in this *Manual* for the Third Reader.

The successful teacher studies most to know the learning point in the minds of his pupils, whatever subject he teaches. In the teaching of no other subject is the learning point missed or overreached oftener than in the teaching of reading. This is especially true in the transition from primary to intermediate reading; that is, the reading which is done for the purpose of learning the use of words as conveyers of ideas well in mind, and that which is done for the purpose of getting new ideas, new knowledge, by use of the same words. Too much is taken for granted. Not enough care is given to making sure that the child reads understandingly. What is of more significance, not enough effort is made to develop power to understand and interpret symbols, *i.e.*, written and printed words.

Before the child can read profitably matter representing new thought, his mind must be enriched with nuclei of information gained from original channels,—persons, things, experiences, in manifold variety. These, with conclusions thereon and imaginings therefrom, must be expressed in words. These symbols must be read by the child as he has given them orally, that he may know the relation of oral to written words and the relation of symbol to idea, to the end that he may have a broad comprehension of the office of symbols.

Very slowly does the child learn to see thought in symbols. The nuclei established in the mind through original channels of information are the standards for comparison

by which all symbols are interpreted. To see that the mind of the child interprets correctly and with intelligence is the chief step in the teaching of reading in the Fourth Reader stage of the work. The transition from the reading of matter expressing what the child has learned from original sources of information—matter representing what he already knows—to the reading of matter for gaining information, cannot be made rapidly, and should be directed with great care. It should be begun soon after the child begins to read.

The teacher should make sure that the new reading matter is within the interpretive limit of the child's mind. If this is made sure, the imagination will be healthily developed and the reader will be instructed as well as entertained. By such careful training only, can the child be fitted for an intelligent study of geography and history from texts, or for an appreciative reading or hearing of fiction or poetry.

The tests for success or failure in this work, or for progress, should be such as will show how well the child is able to image, and express in some original way, by brush, pencil, words or other sign, the meaning of what he reads, rather than how well or how readily he is able to pronounce the words. The skillful teacher will not forget that in case of unsatisfactory results the failure will not be remedied, nor the lack made good, by drill in spelling or sight work in recognizing words, but that the reading may be made satisfactory only by a review of the process through which the child was taught what the symbols represent, or, what is better, by development from a standpoint differing from the first. Children do not understand alike.

The teaching that presents subjects to the capacities of every child is the only teaching by which the school can do justice to all who attend it and secure the approbation of all who send to it.

OUR BEAUTIFUL WORLD.

The lessons given under the general titles, "Our Beautiful World," and "Vapor," in the Alternate Third Reader, are well adapted to training the pupils to read for the purpose of gaining information; also, to training them in good delivery. While subserving these two important ends of the reading exercise, they will, if intelligently taught, serve as the best possible beginning for the rational study of geography, as well as an excellent preparation for the reading of history.

Preparatory to the reading of these lessons, the children should be taken to the fields to observe the decay of rocks, the making of soil, the running of streams, the washing of hillsides, the cutting of valleys, the denuding of hilltops and the numerous other phenomena which the casual, uncultivated reader does not see, cannot see, but which the pupils should be trained to see before they are allowed to read the matter given in this unit of work. Much of this work may be done in the schoolroom, involving the examination of rocks and pebbles, and the study of the causes of their forms. Miniature coal mines may be made to appear; the different kinds of coal may be examined; different kinds of rock — shale, sandstone, limestone, etc. — may be studied advantageously in the schoolroom.

The purpose of this is to give information, and especially to open the eyes of the children, and to put them in a proper intellectual attitude to their surroundings, when, for any cause, they go into the fields or on to the hilltops.

During the progress of this study the children learn many geographical facts, — facts which are valuable as interpreters in their further reading and as nuclei in their further acquisition of geographical information. Some of these are concepts of valleys, slopes, water divides, drainage areas, of denuding of land surfaces, of filling of lake basins and of changes of courses of streams.

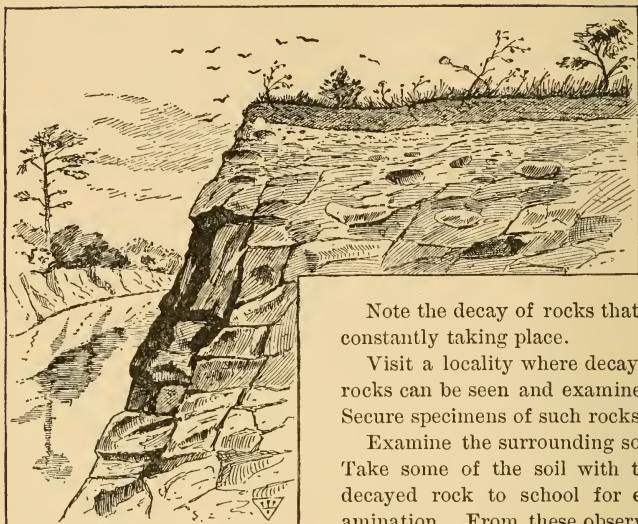
These are the geographical alphabet for further reading and investigation.

Some of these lessons must be given many times, because the real meaning of many of the phenomena is difficult of perception. During the progress of this series of lessons the children should handle many specimens and talk about them; make river basins in sand and talk about them; make miniature ranges of hills and talk about them; compound small valleys into larger ones and talk about them; gather the waters of many little streams and carry them down in one large flow to lake or ocean; define, that is, bound, the smaller basins and in turn the large basins including the smaller ones, thus building in the mind concepts by means of which in later study they may be made to understand the great basins or drainage areas of which a continent is made. During all this activity with the mind and hand, they should read about the subjects upon which they are engaged. This reading is made intelligible by the previous preparation and by the fact that most of it is either exemplified or illustrated in the schoolroom.

One object of the work thus far should be the training of the imagination of the child. If he goes from home he sees other places and compares them with his own, for which comparison he has been prepared; he sees hills, valleys, streams, plains and other phenomena, which he interprets by what he learned in his home study. If he does not travel from home he takes journeys in imagination, through the medium of books put into his hands for that purpose. He thus in imagination visits other places in distant states. These he finds on river banks or by the seaside. He sees ranges of hills, valleys, mountains, streams, dams, canals, factories; he witnesses processes and examines products, in every step of which comparisons are made and conclusions drawn.

The following outlines are suggestive of the work that should be done preparatory to an intelligent and appreciative reading of the lessons and poems given in this unit of reading.

FORMATION OF SOIL.



Note the decay of rocks that is constantly taking place.

Visit a locality where decayed rocks can be seen and examined. Secure specimens of such rocks.

Examine the surrounding soil. Take some of the soil with the decayed rock to school for examination. From these observations and those made in other

places lead pupils to see that the kind of soil of a vicinity depends largely on the underlying rock.

Lead the children to see how decaying vegetation aids in the formation of soil and how it affects its fertility; visit the woods for this purpose.

Obtain specimen of soil for study. Visit fields. Lead the children to see that the top layer consists largely of decayed vegetation. Plants turn black as they rot, thus making this layer of soil a dark color. Have the children note places where excavations are made. Collect samples of soil from different depths. Have pupils examine these soils to find out their composition.

Agents in Soil Making. — Lead the children to see the work which ice, snow, frost, heat, wind, air, water, roots, etc., do in making soil. Lead them to see that water soaking into the crevices and pores of rocks expands by freezing, thus breaking the rock. Illustrate this expansion of frozen water by letting water freeze in glass bottles; refer to the bursting of water pipes caused by the freezing of water.

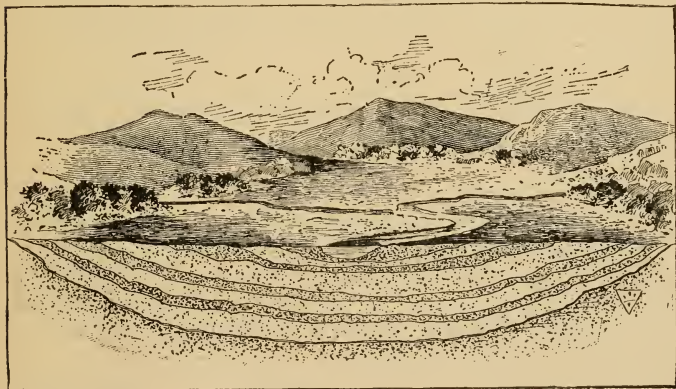
Tell the children how stonecutters employ this method of breaking rock in quarries.

Lead the children to see that sudden changes in temperature will cause rocks to crumble and decay,—work of heat and frost. Also notice that after the rock begins to decay, seeds seeking a home, but needing no soil, only a place to fasten themselves, fall upon this rock and grow ; that in time these plants form a network, keeping the rock moist with acids from plants, which help to rot the rock and make it crumble.

Lead them to see that in time earth forms in the cracks and crevices of the rock, making it possible for plants having roots—grasses and low shrubs—to grow ; that the growing roots help in breaking the rock, making it crumble and decay.

Thus the children may be led to see that soil, after a forest begins, grows rapidly in two ways,—first by the constant decay of vegetation, and second by decaying rock caused by the acid in water from decayed vegetation as well as by the expansion of freezing water.

Lead them to see upon what the fertility of the soil depends ; also, how soil is carried and distributed over the plains.



Sandstone.—By examining a freshly broken stone, children discover that it is rough ; that the roughness is caused by sand grains ; that by scratching the stone with a knife a harsh grating sound is produced ; that placing a piece between the teeth causes a sensation like that produced by sand taken into the mouth. By these observations and experiments they may be led to see that sandstone is made of sand grains united to form a compact rock.

Lead them to see that such rock cracks after being exposed to the weather—rain, hail, sleet, snow and frosts—for years, and that the crevices fill with water, which freezes and expands, causing the rock to break and crumble, or to decay. These pieces fall and are carried by the rains to brooks and rivers, where by the action of water they are ground until the whole is separated into tiny grains of sand, to be carried to the ocean, where they may help to form other sandstone rocks.

Tell the children that these sandstones decay under the soil, along the banks of rivers and on the seashore.

Sand.—Have the children examine sand,—noting shape, size, hardness, sharpness, cutting properties and color.

Show how sand is used by man in glass-cutting.

Lead them to see that the cutting power of a stream of water depends very much on the amount of sand and pebbles it has in it.

Show that by this means the river water gets a power of wearing stones.

Show that much of the sand carried by rivers is deposited on the banks and mixed with the soil.

Show that the sand carried to the sea may by pressure form sandstone rock. Illustrate by the packing and hardening of salt.

Note uses of sand.

Thus the children may be led to see and to feel the stories which rocks tell of the past and what they prophesy for the future.

In a corresponding way study limestone. Secure specimens containing fossils.

Show that water dissolves limestone. Illustrate by the incrustation from the bottom of the teakettle. From this children can be led to see that water dissolves rock.

Show a piece of limestone and then subject it to the heat of the furnace. Have the children examine the furnace-heated limestone and note that it is lime, thereby learning one of the constituents of limestone.

Show why soil should be kept open to admit air and water.

Show why presence of stones in soil is desirable.

Obtain from pupils the reasons for plowing in autumn.

Have pupils read lessons 3, 4, 8, 9, 13, 15, 17. Have them study and read the poems, "Jack Frost," "On the Cliff," "Seashore," "The Sea." Find other poems relating to these subjects.

Encourage pupils to find matter pertaining to these subjects. Let them tell what they have found and read.

Have them write the "Story of a Grain of Sand," or "The History of a Piece of Sandstone," etc.

Hills and Valleys. — Visit a hill, noting its shape, parts, composition (material of which it is made).

Mold a hill in sand. Draw a hill.

Obtain from pupils the names applied to different parts of a hill — top or summit, base, foot or bottom, slopes.

Observe that the slopes may be gradual, steep, or abrupt.

Call attention to the variety in size and shape of the hills pupils have seen.

Show how the agents of denudation — the sun, frost, water, rain, mist, etc. — alter the size and shape of hills.

Show how the wind, brooks, rivers, etc., remove the results of this action — the work of these agents. (See Outlines for Soil Making.)

Show that the presence of soil and grass on a hillside helps to preserve its form.

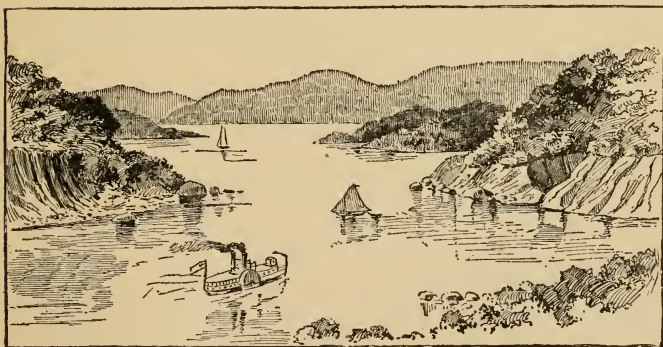
Mold and draw a chain of hills.

Call attention to valleys. Show that some are wide while others are deep and narrow.

Show that the softer the stone of which the hill is made the wider will be the valley.

Have pupils read lessons 1, 2 and 5.

Find other lessons on the same subject for pupils to read.



Mountains. — Call attention to the difference between hills and mountains.

Examine the formation of mountains.

Mold in sand and represent a range of mountains.

Describe a volcano ; an earthquake.

Tell the children the story of the eruption of Mt. Vesuvius in A. D. 79. Tell them of other volcanoes.

Show that the size and forms of mountains are being constantly modified by the agents of denudation.

Tell the children of the formation of glaciers, icebergs, and their work. Describe cañons, as the cañons of the Colorado. Show pictures of them.

Lead them to see a peak, a precipice, a chasm, a pass, a gap, a gorge, a ravine, a plateau.

Show how the cold, snowy heights aid in the condensation of vapor.

Read lessons 5, 6, 7, 16.

Supplement these lessons by lessons 4, 14, 21, and parts of lessons 15, 16, 17, *Geographical Reader*.

Encourage the children to find other lessons.

THE HILLSIDE SPRING.

Review the work of Vapor in Third Reader. Lead pupils to tell what becomes of the water that falls as rain in a clayey region. Note the fact that part runs off in gutters and in creeks to a large stream or river. Show that much which is collected in pools, ponds, etc., is evaporated. Show that plants absorb much of the moisture.

Lead pupils to see that much of the water which falls on permeable soil sinks into the earth.

Trace the underground course of water, showing where it comes to the surface again, and why. Show pictures of sections representing caverns, the work of water.

Visit a spring. Tell the children of iron springs, hot springs, sulphur springs, geysers, etc. Have them read of the wonderful geysers of Yellowstone Park and Iceland.

Lead them to see the difference between wells and springs.

Tell them of artesian wells.

Make all mental pictures vivid.

Have pupils read the lesson, "The Hillside Spring."

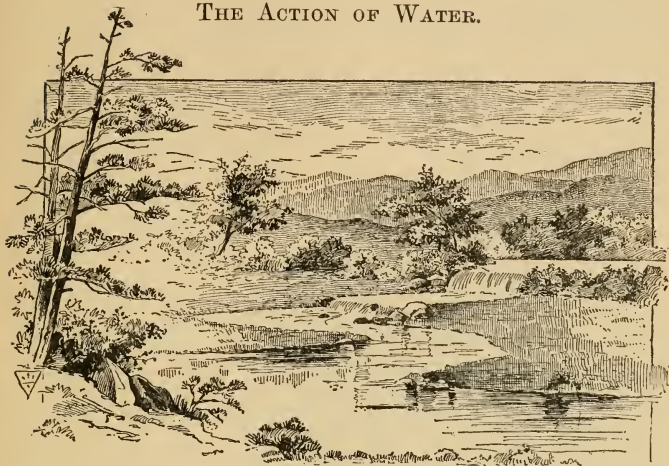
Find other lessons supplementing this for them to read. (*Geographical Reader*, lesson 6.)

Have pupils read the poems "The Fountain" and "The Rivulet," and other poems of nature written by these authors.

Have them read "Notes and Suggestions," pages 346 and 351, Fourth Reader.

In connection with all these lessons encourage pupils to find selections for home reading. Have them tell what they read.

THE ACTION OF WATER.



Rivers. — Visit a stream of water which may be found in the vicinity in which the children live. The cutting power of water may be illustrated in almost any region.

The formation of alluvial land can be seen along the banks of any stream. The gutters after a rain will show the carriage of sand, the rolling of stones, etc. The pupils should be led to see how the flood waters overflowing the flats leave sand, mud and pebbles. Illustrate the carrying power of water by filling a glass jar with water containing fine clay and sand.

Show that rivers have their sources in springs, lakes, etc.

Lead them to see that rivers are supplied with water by brooks, creeks, rivers, springs, ponds, lakes, etc. (tributaries). Smooth tilled fields and new dirt roads illustrate the principle of the formation of river systems.

Lead pupils to see how a stream is turned from its course by ledges of projecting rock or by changes in the level of the ground.

Lead them to discover how much land a river drains (river basin).

Mold a river basin. Lead the children to see what bounds a river basin.

Have them tell why the water of a river flows. Note the slopes of a river.

Lead the children to see the formation of deltas.

Have pupils read lessons 11 and 12. Have the poems read.

Find supplementary reading on this subject for pupils to read. (*Geographical Reader*, lessons 6-14 inclusive.)

Coal. — Go with the pupils to one of the “peat swamps” which are found so common in temperate and moist regions; if this is not possible, a moss suitable for the purpose may be found among the hills or in some low, marshy situation.



From an examination of the peat bogs or mosses lead the children to see that these plants are constantly throwing out new shoots, which store up sunlight in their roots, stems and branches, while the lower portions of the stems decay; lead them to see that the roots, stems and leaves of this dense mass of

vegetation, saved from complete decay by being saturated with water, become blackened, softened and matted together into a thick, spongy mass called peat, which, cut into slabs and then pressed and dried, makes a fair fuel. Show specimens of such fuel. Tell children of the burning of peat fields.

Tell them that frequently the leaves and stems of reeds and other water-loving plants are recognized in peat; trunks and branches of trees have been found many feet below the surface of the ground. This shows that peat mosses are frequently formed upon the site of old forests.

Show them that a peat bed thus formed was, by a sinking of the land or other cause, buried beneath a thick layer of sand, mud and ground-up rocks by an overflow of the sea. Thus buried, the peat was hardened by heat and pressed by the weight thrown upon it until it was gradually changed to coal.

Lead them to see that after the formation of this first bed of coal the old land was raised above the sea level; soon a vegetation as dense and luxuriant as its predecessor flourished. In time partially decayed vegetation accumulated, forming another bed of peat, which, buried beneath sand, mud and ground-up rocks by the overflow of the sea, became a layer of coal. This process was repeated, until layer after layer of coal was formed in some sections. Show pictures of such sections.

Thus the children may learn that the light and heat of our fires are the bottled-up sunshine of past ages.

Make all mental pictures vivid.

Show pictures of the vegetation of the carboniferous or coal period.

Read to pupils portions of the lesson on coal in Shaler's *First Book in Geology*.

Tell the children how coal is taken from the ground.

Have pupils read lesson 16.

Find other lessons on coal for them to read.

Have them write the story of coal in their own language.

BOOKS OF REFERENCE FOR TEACHERS.

Science for All, Vol I., "Hills, Dales, and Valleys," "Rivers, their Work in Cañon Making," "Geysers," "A Piece of Coal," "Lakes and how they are formed." Vol. II., "Continental Islands and how they are formed," "Oceanic Islands and their History," "Glaciers, how Glaciers move," "The Story of a Volcano," "A Peat Bog," "The Gravel on the Garden Path," "Why the Sea is Salt." Vol. III., "Burnt-out Volcanoes," "The Bottom of the Sea," "The Scenery of the Shore," "Tablelands and how they were formed," "Coral Islands," "The Rivers of the Sea." Vol. IV., "Earthquakes, how Earthquakes are caused," "A Clod of Clay," "A Grain of Sand," "The Wanderings of a Pebble," "Cracks in the Earth's Crust." Vol. V., "A Coal Field," "An Iceberg," "Rock-making Rhizopods."

Parker's *How to teach Geography*, Frye's *Sand Modeling*, King's *Methods and Aids in Geography*, Shaler's *Our Continent*, Heilprin's *The Earth and its Story*, Paul Bert's *First Steps in Science*, Tyndall's *Forms of Water*, Geike's *Physical Geography*, Huxley's *Physiography*, Ingersoll's *Madam How and Lady Why*, Jackman's *Field Work in Nature Study*.

PLANT LIFE OF THE EARTH AND ANIMAL LIFE OF
THE EARTH.

The lessons of the two sections following, viz.: "Plant Life of the Earth" and "Animal Life of the Earth," are units of thought affording opportunity for systematic study. They present much information and are carefully embellished with poetry. It is believed that an intelligent reading of them will be interesting to the pupils and will afford opportunity for profitable work in word study and thought arrangement, as well as for elocutionary drill.

In no case should a poetical selection be read until the teacher is reasonably certain that the children understand the lesson which the poem is intended to embellish or supplement. Thus pupils may be led to read, appreciate and enjoy poetry that is worthy a place in the library of the scholar.

These poems, or selections from them, are gems which, if thought desirable, may be committed to memory. Gems whose sources and relations are not known by the learner, are of doubtful value from any standpoint except that of pure sentimentality.

Much collateral matter should be read. It is believed that all supplementary reading should be for the explanation, for the greater elaboration, or for the practical application of the regular work of the school curriculum. Miscellaneous "supplementary reading" is not supplementary in the right sense, in a true educative sense. By the reading of properly selected supplementary matter the child will be helped in learning how to read topically, sequentially and most profitably.

Children may be encouraged to find supplementary matter in their home reading and bring the same to recitation. Thus will more reading of the proper kind be insured, and, what is of greater value, judgment will be developed, and the will properly exercised and thus properly trained.

Much reading aloud before the class of entire selections or of portions representing entire units of thought is recommended, not only for the purpose of training in good delivery, but for the better purpose of training the pupils in seeing the units of thought as entities. This will be facilitated by having the reader select and name the coördinate divisions of such units. Thus will pupils develop an appreciation of unity and sequence in what they read, and begin to learn their value in conversation, written composition and in study.

It is recommended that the imaginary stories given in the text be read with much care, and that many other stories be written by the pupils and read in class. Topics for such stories will suggest themselves to any one who will read "The Story of a Grain of Sand," page 47, or the poem "Lily's Ball," page 103. The object of this work is, while allowing spontaneity, to secure training along healthful and determinative lines of imagination. This is safer work than the reading of fairy tales. The teacher can judge of the intelligence with which it is done, for he can estimate the product by the measure of nature's laws, and therefore can know whether the imagination of the writer or talker is clear, healthy and under control, or is clouded, unintelligent, undirected or visionary. This kind of training, together with the knowledge of the life of to-day which the child now has, fits him for reading stories, anecdotes and poems representing the leading events in the history of our country, and given in sequential order.

OUR GOVERNMENT AND PEOPLE.

While reading "Our Government and People," it should be the effort of the teacher to have illustrated in class the lives and customs of the people about whom the class is reading, by objects when it is possible to get them, or by

pictures when objects cannot be secured. A veritable museum may be obtained through the efforts of the children by the enterprising teacher. A veritable picture gallery may be made by any one. The museum and the picture gallery are both desirable. Maps should be made to be referred to while reading. In reading history, referring to maps should be cultivated till it becomes a habit.

The teacher should give such instruction and such direction for home or seat work as will induce each child to employ his whole self, to put forth his best efforts for its accomplishment. The recitation should be such that the child is not only permitted, but is expected, to present that which he has done. Therefore the teacher must not only know the subject he would teach, but that he may properly direct pupils in their home work he must have definite knowledge of many sources of information respecting the same which he can cite with great exactness. He must know the respective values of such sources of information, the difficulties which each offers to the searcher, that he may correctly judge of the value of results presented to him. It is not enough to know the subject to be taught; where and how it can be learned are important points in directing pupils, and how the subject is applied when learned is not one bit less important.

Each new perception enriches the body of previously acquired perceptions, and in a measure, unappreciable it may be, changes each and the whole as an entirety. Now the office of home and seat employments is to work over this new intellectual whole until the interrelations of its newly adjusted parts become known and the knowledge becomes a source of power to its possessor.

Many comparisons should be made between persons read about and ourselves, between modes of life of other times and those of our day, etc. This talk will lead to much collateral reading, which should be encouraged. It must be remembered that the object is not only to teach the

children to read this text, but, what is of greater value, to give them power to read history understandingly. If this is accomplished, they will have learned to read.

The poetical and prose selections supplementing this unit of work will be understood by the child when he knows the history of the growth of free government. A reading of these, with the knowledge of whence and how and why the government came, will establish an abiding patriotism, — *abiding*, because it will spring from a *love* resulting from knowledge and not from a transitory emotion.

The following reference books will be found helpful to pupils while doing the work given on pages 201–231 inclusive: —

Green's *History of the English People*, Yonge's *Stories of English History*, Dickens's *Child's History of England*.

Assign lesson 1, "The Saxons," for pupils to study.

Before asking pupils to read the lesson aloud, do the work suggested by the following outline: —

The Saxons. — Have pupils find and locate Denmark on the map of Europe.

Show pictures for study representing the country as it is at the present time.

Lead pupils to form true mental pictures as it was in the fifth century.

Lead them to see and understand the formation and protection of the Saxon villages.

Note carefully the government of the Saxons. Compare with the government of the village, town or city in which children live.

Lead pupils to describe the Saxons of the fifth century.

Compare with the English and the Americans of the present time.

Note the occupation of the people then; compare with their occupation now.

Note their love of war and the weapons used; their love of the sea and the ships used. Compare the weapons of war used then with those used now. Compare the ships used then with those used now.

Have pupils trace on the maps the routes traversed by the Saxons. Find and locate England.

Have pupils read orally lesson 1.

Have them study and read Longfellow's poem "The Skeleton in Armor." Have them memorize three stanzas, beginning with "Far in the Northern Land."

After doing the above work have pupils write a composition comparing Denmark of the fifth century and Denmark of the nineteenth century.

Have pupils write a description of the Saxons of the fifth century.



Assign lesson 11 for pupils to study. Have them read silently Chapters I. and II. of Yonge's *Stories of English History*. Before having the lesson read in class do the following work:—

Britain. — See that the pupils know of the invasion of the Romans into Britain, led by Julius Cæsar, 55 B.C.

See that they have true mental pictures of Britain and the Britons at that time.

Show them that nothing of importance was accomplished by Cæsar.

The Romans in Britain. — Tell pupils of the Roman Conquest one hundred years later.

Note the occupation of the Britons at that time.

Note the number of tribes and government of each. Note the weapons used in battle; chariots, — how constructed and how used.

Note the religion of the Britons.

Have pupils describe the Romans.

Lead them to tell how the Romans conquered the Britons.

Note the work done by missionaries.

Note the improved condition of the country and of the people under Roman rule for five hundred years.

Explain why the Romans left Britain.

Have lesson 2 read in class.

Pupils will now be interested in reading *Ancient England and the Romans*, Chapter I.; *Child's History of England*, by Dickens.

Assign lesson 3, "The New England," for study.

Yonge's *Stories of English History*, Chapters III., IV. and V.

Do the following work before the oral reading of lesson 3.

Note the England which the Saxon pirates found.

Compare with the England or Britain which the Romans found.

Tell the story of the English Conquest.

Result of the English Conquest. — The Britons were forced to move into what are now Wales and Scotland. Locate Wales and Scotland.

Britain became again a savage, heathen country.

Note the government of the Saxons; compare with their government in Denmark.

Note the change of name of the war leader and the formation of numerous kingdoms.

Note the cause of the numerous kingdoms being united into three. Locate these kingdoms.

Note the work of the missionaries during the three hundred years of Saxon rule.

Note the churches which were built throughout the land.

Note the changes in the customs of the people. Note their progress.

The Northmen. — Tell or have pupils tell the story of the Northmen from Norway. Locate Norway.

The three Saxon kingdoms united. Cause of union.

The English became one people under one king.

Have pupils read in class lesson 8.

They can now read intelligently *Ancient England under the Early Saxons*.

Assign for study lesson 4, "King Alfred the Great."

In connection with this have pupils read *Alfred the Great*; Dickens's *Child's History of England*, Chapter III.; Green's *History of the English People*, pages 75-81; Yonge's *Stories of English History*, Chapter IV.

Have pupils tell the story of King Alfred.

Have them write a description of King Alfred's character.

Lead them to see that England was ruled by Saxon kings until the year 1066.

Have children write a composition comparing the Roman reign of Britain and the Saxon reign of England.

Assign for study lesson 5, "The Normans."

Assign for outside reading, Dickens's *Child's History of England*,

Chapters VII. and VIII.; Yonge's *Stories of English History*, Chapters VII. and VIII.

The Normans. — Have pupils find and locate Normandy.

Lead them to see that Normandy was settled during King Alfred's reign by pirate Northmen. Note the change and progress of these Normans within one hundred years.

For what were they especially noted?

Lead children to know the principal points of the Norman Conquest.

Tell the pupils of the Battle of Hastings. Green's *History of the English People*, pages 113, 114.

Note that at the close of this battle, in the year 1066, William, Duke of Normandy, became king of England.

Note the form of government under Norman rule.

Note the events which led to the Great Charter.

Note the object of Magna Charta.

Note some of the sixty-three things of which it speaks.

Note the promise each king was compelled to make at the time he was crowned.

Have pupils read in class lesson 5. Have them study and read lesson 6.

Have pupils read lessons 1-6 inclusive, consecutively.

Have pupils write the story of "The Growth of the Country."

For the study of "Columbus" see outline given on page 94.

For the study of the "Indians" see outline given on page 92.

Compare their mode of living with that of the Saxons and the Britons.

Note the way in which each tribe was governed. Compare the government of the Indians with that of the Saxons.

Have pupils describe the dress of an Indian brave.

Have them write a composition comparing the Indians and the Saxons.

In a corresponding way teach other units of work given in "Our Government and People."

Direct pupils in their reading to a better understanding of the subject; in their talk, to better expression and understanding. Preserve in all a connected outline of general facts from the invasion of Britain by the Saxons to the present time.

REGULAR SERIES — FIFTH READER.

THE work and study which the children have been required to do in using the preceding books of this series have given them experience in categories of knowledge that represent the great movements or achievements in scientific research, that knowledge which has so much to do with making the social world what it is and which has stamped upon it its own character.

Keys to the broad lines of knowledge have been given. What is meant by a key or interpreting nucleus to be secured by experience may be illustrated by the work required as suggested in the outlines on "Vapor" and "Our Beautiful World."

Having an understanding of these subjects, the child may easily be led to understand a mass of literature on these interesting phenomena, which, without this foundation in experience, would be to him largely a sealed book, though he were led, driven, made to pronounce in reading, or even to commit to memory, the words in which it is found. By this is meant a body of pure literature, whose office is to please and cultivate rather than to instruct and cultivate. "A Description of Niagara," "A Description of a Storm at Sea," Holmes's "Chambered Nautilus" and "The Living Temple," Gray's "Elegy written in a Country Churchyard," Bryant's "Waterfowl," Proctor's "The Sea," Ruskin's "Sunset," represent this literature.

"I thought the sparrow's note from heaven,
Singing at dawn on the elder bough ;
I brought him home in his nest at even,
He sings the song, but it pleases not now,
For I did not bring home the river and sky,
He sang to my ear, — they sang to my eye."

One must get close to nature to know it well; must learn much of birds and flowers; must commune with river and sky as a lover, to understand how Mr. Emerson could see in them the enchanting part of bird song.

“Ye banks and braes o’ bonnie Doon,
How can ye bloom sae fresh and fair?
How can ye chant, ye little birds,
And I sae weary, fu’ o’ care?”

No dictionary can define for the student this most masterful contrast of English tongue; no grammar or rhetoric explain it; no eloquent master develop it. He alone can know and feel its full force who, though life may have given to him the darkest sorrow, knows by experience of the caroling of birds, of flowery banks, of chattering brooks and of carpeted meadow lands stretching to shaded nooks in the hillside beyond.

The child rightly prepared in experience, when reading, knows, because he has made the knowledge by which and with which he learns it when he sees the symbols; what he reads is his own, because he has added to it that which was his by discovery. He understands what he reads, and is deeply interested in it as a statement of truth, because he knows exactly the processes of nature wherein the truth lies; these processes he images as he reads, by the memories established by doing and seeing. Reading to him is at once easy, pleasurable and enriching.

The boy or girl having had this training is prepared to read critically selections from accepted authorities—accepted alike for their authenticity and for their literary merit. These selections should treat of the same or closely related subjects, that the reader may learn to compare, understand and estimate the value of different modes of thought on kindred subjects, different ways of expressing kindred thoughts and impressions, as well as to receive training in seeing critically by use of represented fact, and

in thinking independently and sequentially after the examination of represented thought. The reading lesson of advanced grade, no less than the object lesson, should train the pupil to see accurately, connectedly and broadly, and to think with corresponding accuracy and breadth.

The first four parts of the Fifth Reader of this series have been arranged to afford opportunity for the kind of reading above referred to.

Part I. consists of a number of articles, by as many distinguished authors, treating of various phenomena of inanimate nature.

Part II. furnishes a variety of reading on closely allied subjects in the world of animate nature.

The selections of Part III. relate exclusively to patriotism or to subjects underlying a true and correct patriotism.

Part IV. is composed of a number of units or groups of selections, each of which is distinct in itself, relating to the humanities.

The teacher will find that the gradation of the work is easy, while the arrangement is logical. It will be found desirable and most profitable to teach each of the parts or units above mentioned as an entirety, to be read and studied as a whole apart from other matter.

The learner, after some practice in unified miscellaneous reading, should read and study masterpieces of literature, that he may know and appreciate them as such; know their authors and their relative standing in the field of literature, English and American.

Field work only gives opportunity for intelligent classification, and must precede it. This is no less true in a profitable and consistent study of literature than in the study of natural phenomena. This field work should be begun as soon as the pupil is competent to do such work intelligently.

Part V. offers opportunity for field work in literature of the most profitable kind.

Opportunity is given for the continuous study of the works of a single writer. Complete selections, both in prose and poetry, are given. Children, like their elders, enjoy the whole story, and read with eagerness a book or poem, when they would not take time for more than a glance at a short selection from the same.

A good biography of each author and an analysis of one or more of his writings is given. The analyses of these literary wholes will suggest to the teacher plans for studying other selections.

It is confidently believed that a proper study of the selections given will cause pupils to become so interested in the work that they will read with profit entire books of these authors.

A book of the fifth-reader grade should furnish material for widely varied exercises in elocutionary drill. The selections intended for special practice in good delivery found in the Fifth Reader of this series are so chosen and so connected with other matter as not to mar the character of the work as a literary reading book, yet they afford at the same time an interesting and profitable variety, and their specific and varied character is such as to secure, if used properly, a rounded and symmetrical training.

The literary notes and suggestions given in Part VI. have been prepared with much care. The teacher is requested to study carefully the suggestions to pupils contained in "Reading Aloud," Part VI., also suggestions given in "Figures of Speech" in Part V. of the Fourth Reader of this series.

THE ALTERNATE SERIES.

THIS series treats of subjects drawn largely from the pupils' environment. Children have an interest in any material thing that they can handle, examine and talk about and try to make, but their interest soon dies out unless there is something new to lead them on, something new to be discovered in the material which they handle. Science material presents never-ending opportunities for discovery of the new to children. Interest never tires in dealing with this material, because it is compensated by new knowledge in every effort; it is gratified, encouraged, though never satisfied.

In the preparation for reading the text, the children are given opportunity to discover knowledge and to exercise their bodies and minds in correlation in getting knowledge. Little by little they are gaining a certain amount of organized knowledge containing elements which enable them to understand and to assimilate new knowledge found in symbols. They are given opportunity to develop every form of expression, — expression by making, modeling, painting, drawing, writing; to express their own thoughts, not merely to reproduce the thoughts of others. Opportunity is afforded to read many selections treating of one general topic, each succeeding selection growing out of the preceding one, by which it is understood. The children read choice poems, — gems of literature relating to the subjects studied, — thereby leading them to see the artistic and poetic sides.

Broadly and radically there are two kinds of work required in the use of these books: one is that of giving

the child an opportunity to make the beginnings of an education by experience; that of establishing interpreting nuclei, and of giving direction to doing and to knowledge getting in satisfying impulse, that of beginning the symmetrical structure of mind; the other is that of giving the child an opportunity for adding to and continuing education and growth by the use of reading matter, in getting more knowledge and a broader view of the universality of truth and its relations to life. The first must precede the second. In this series the second line of work is introduced early, while the child is getting experiences, but follows the first, step by step. This is the natural order of the child's mind before coming to school. The school must not change this order.

The experiences given preparatory to the reading should be varied and numerous, and should be immediately followed by reading representing like kinds of knowledge, for the purpose of giving nourishment and strength to mind started in experience. The broader the experience, the more categories there are embraced by it, the broader may be the range of help and growth which the child may get from symbols.

The world is full of graphic symbols representing the knowledge, ambitions and accomplishments of man, the formulated story of man. To the interpretation of these symbols the child is to be led. The teacher is to see that he gets experiences by means of which he can interpret them. How necessary that he be taught to read aright!

In the varied employments of the primary work the teacher must secure the establishing of broad and sequential lines of experience, and with each experience the graphic word symbol representing it must be given. As conversation proceeds between teacher and pupil, natural, unconstrained, but correct, the results appear to the eye of the child on the blackboard in large, correct, simple, script forms.

The child reads his own words representing his own knowledge. His interest in these forms is great, perhaps not any less and it may be greater, than it was in the objects or processes by association with which he created the knowledge. The forms stamp themselves vividly on his mind, and to realize them as a product of himself he makes them on the board with chalk or on paper with pencil, after the forms made by the teacher have been removed. The action of eye and hand has made the form a part of the knowledge. The three processes, — making knowledge, expressing it orally, expressing it in script, — are carried on simultaneously, as nearly as three processes by the same person can be simultaneous. He discovers that the lesson in his reader represents that which he has experienced, thus causing him to fully realize the exact purpose and value of symbols. How necessary that the text in his early reading books be on lines of knowledge representing his knowledge making! This is the nature of the text given in "The Normal Course in Reading." This is what characterizes the series.

The series deals with truth. The child is given opportunity to make images of definite experiences the truthfulness of which the teacher knows. Fairy tale and folk-lore stories are given for elaboration and further application after experiences have been had by which they may be interpreted. Truthfulness as opposed to error is the first requisite of language as representative. To insure truthfulness in teaching language, the teacher must know what is in the child's mind. This cannot be done by the use of folk-lore, fable and myth, at an early stage in mind growth. Fairy tale and folk-lore are not more interesting to the child than are the facts of nature which surround and affect him without number. No fairy tale is so interesting to the child as the facts of nature, especially those which he has discovered himself, the knowledge of which he has himself attained by his own act. This is psychic law.

A fairy tale founded on and enriching a fact that the child has discovered may be of great interest to him, and may be given him with much profit; but giving the fairy tale before the discovery of the fact is a reversal of nature's order of teaching.

The moral effect of a course of reading which deals with truth and permits only images of truth, and leads to and induces productive imaginings by combinations of truth, is to arouse self-activities leading to the true and beautiful in life, which make for these qualities in character.

When the reading work is thus conducted, teachers may know what they are doing. When based upon fairy tales, results may appear brilliant if the work is well done, but teachers cannot know the moral tendency of their work, and therefore be sure of what they are doing. The unreal is an unsafe influence from which to get directing tendencies for developing psychic force.

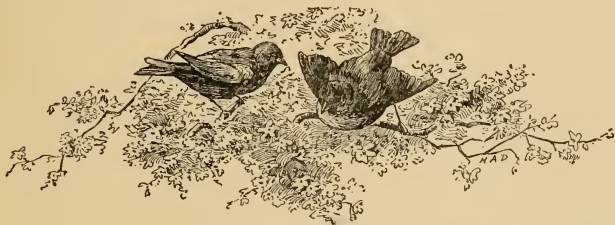
The suggestions, plans and outlines given in this treatise on reading show fully the method of teaching the "Alternate Series."

In this series the beginning of the use of literature is that which is given to enrich the work in experience getting. The teacher may introduce the subject by story, myth or song, relating to the subject, but not given in the child's reader. (He himself discovers that many of his reading lessons are so introduced.) Investigation and discovery enriched by literature make the subject so interesting, so delightful to the child, that the drudgery of learning to read, to spell and to write, is reduced to the minimum.

A lesson is to be given,—one of a series. The child hears the teacher repeat—it may be from Longfellow—something, brief if necessary, much longer if it is possible for the teacher to give it, about birds. As the poem (or story) proceeds—

“Learned of every bird its language,
Learned their names and all their secrets,
How they built their nests in summer,
Where they hid themselves in winter,
Talked with them where'er he met them,
Called them Hiawatha's chickens” —

the teacher sketches on the board, tree, stream, flower and bird, each in its appropriate place in the composition, mak-



ing a pleasing picture. The children tell of birds they know, that they have seen, giving their names and telling where they have seen them. They talk freely. The bird in the room for study is examined; every child takes part. Other poems are repeated; another picture is drawn, or the first added to; children talk of birds at home, of birds in the wood, of birds in the meadow. During all this exercise language is corrected when wrong. The examination of the bird is continued. A bird story is told by the teacher. A sentence given by some child is put on the board by the teacher. The process is repeated several times. This the children read and re-read as the teacher writes it again and again, and copy from memory. For the first time they see the word *bird*; they learn it by sight. They make it in good script, and with it other words used in expressing what the sentence gives.

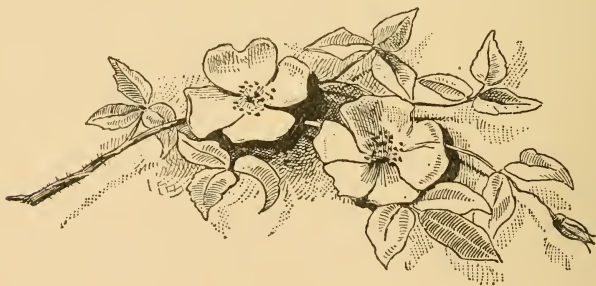
The lessons on the bird are continued. The peculiarities of form and habits, and many facts of profit and interest, are found out and given by the children in written lan-

guage. New literature is repeated to further enrich the subject, giving to it added interest and delight. None of the literature is learned, however; it is not given for that purpose. The full, rounded work thus done, the facts thus discovered,—and they are many,—are put into reading matter made by the children, written by them and read by them. Now they read the lessons in the reader, and other matter which they may find relating to the subject. They may read the stories and poems that were repeated to them, or text that gives additional information.

A lesson is to be given, one of a series of which “Flowers” is the subject. See Alternate Third Reader, pages 73–100.

The lesson may be introduced by having the pupils sing a song relating to flowers, learned in previous study of the subject.

While the children are singing, the teacher sketches on



the blackboard, stream, meadow, trees and flowers, making a pleasing picture representing the song.

Then the children talk of the beauty and use of flowers that they know; of their homes, whether in shady or sunny places, in wet or dry soil. A plant in bloom is presented for examination,—its color, fragrance and beauty noted; then the plant is studied in its environments. The flowers are examined by the pupils; their size, shape, position and arrangement noted and talked about; the parts are examined

and the shape and uses of parts are talked about. Care is exercised in having pupils talk well. Talking well implies much more than talking with grammatical accuracy. It involves structure of composition, the sequential arrangement of thought, and the use of the idiom that properly represents such arrangement. As the talking lesson proceeds, the new words and idioms are written on the black-board, that the children may learn their forms — now is the time for them to learn them.

For seat work they may reproduce the work, exercising the same care in the sequential arrangement of thought that was used in talking. They may paint or draw the flowers, paint or draw the parts, paint or draw the plant, paint or draw a picture representing a story relating to the flower.

The lessons on flowers are continued by the teacher; other poems are given; a story or myth related to the flower studied is told. The children talk about what they know; they write about it in sequential, correct composition. They do and learn, find out and think. They know what they are to do. They work for a purpose. The stories and myths are reproduced in good English; then the reproductions are read. The pupils compare one flower with another and write the comparison. There is no uncertain work.

While doing this work the children are learning to read by reading many stories, descriptions, and poems based on the work which are given in their reading book. They are able to read understandingly, not only the regular reading lessons, but the many selections which supplement it. They have developed for themselves a good degree of power (power is the memory of doing), and have gained a knowledge of forms in doing this. The knowledge of the birds and flowers which they have acquired is the key they use with this power. The reading of that which corroborates what has been found out by investigation gives confidence in self to a wonderful degree, and is a promoter of

effort in further research. The strength that comes from this confidence is used for helping self to become more helpful. This is the kind of reading matter that is the easy step toward that which is given as a source of new knowledge, an important matter for consideration. This is the second step in the use of books in the work of the primary schools.

Throughout the series literature is first used as environment, an enriching source from which, or a force by which, interest is stimulated. It lifts the subject in hand into the realm of safe emotional delights. Yet it is at no time intangible; its effects are legitimate and rational, safe yet satisfying. It is next used as a source of knowledge. New knowledge of the subject is secured by use of the very power the subject has itself induced, and becomes a means of refinement, and also a field for drill in fixing forms and correlating memories for further interpreting uses in future school or life work.





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